FINOS Fintech Open Source Foundation

In partnership with GitHub, The Linux Foundation Research, Scott Logic

With special thanks to Adaptive, Symphony

The 2025 State of Open Source in Financial Services

Fintech Open Source Foundation (FINOS)

October 2025

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The 2025 State of Open Source in Financial Services

93% of respondents say that using OSS ***improves software quality*** in their organization.

89% of respondents agree that using OSS ***delivers business value*** to their organization.

84% agree that open source is ***valuable to the future*** of the financial services industry.

Nearly 20% recognize ***annual cost savings of greater than $1 million*** from open source usage.

Top motivations for contributing to OSS are ***giving back to the community, influencing critical projects***, and ***reducing technical debt***.

Security vulnerabilities (52%) and the ***lack of ongoing maintenance*** (48%) are the top concerns around open source.

64% of large financial institutions have ***implemented an OSPO***, and 67% have joined or associated with ***open source organizations***.

A ***lack of clear ROI*** (48%) and ***legal and licensing concerns*** (48%) are impeding open source contribution.

49% believe GenAI will have the biggest impact on ***internal developer productivity*** vs. 23% for ***client-facing services***.

Over 50% see ***open collaboration on industry standards*** delivering the greatest value.

Standards, open source ***models***, and open source ***frameworks*** have the greatest impact on AI development (56%, 54%, and 52%, respectively).

Most organizations (44%) expect to ***realize an ROI from GenAI in 2–5 years***, with 18% already seeing returns.

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Foreword

As I reflect on my discussions with hundreds of clients worldwide over the last year, it's clear that the future of banking is being reshaped by open source systems. Today, banks' technology stacks are highly complex, dominated by costly and inefficient legacy systems. Within these systems lies a mix of both strategic capabilities and necessary foundational elements. Strategic elements, such as mobile banking apps, marketing and relationship manager tools, and pricing strategies, are unique to each bank and serve as drivers of competitive differentiation. Necessary components—including risk and regulatory compliance, reporting, basic payment services, common data models, and simple operational functions, such as physical cash management systems—provide little to no differentiation. The question for the global banking industry is: why do we collectively spend so much money on so many things for so little differentiation? This is the foundation of open source thinking—why do things individually that we could do better collectively?

By sharing the development and maintenance costs of these necessary systems, banks can eliminate redundant efforts and expenses. The capital markets sector has already recognized the benefits of this through its need to standardize data structures to facilitate trading and settlement. Extending this approach to retail and commercial banking could yield exponentially greater benefits globally, particularly in areas where standardized protocols and shared code can be leveraged.

The Linux operating system exemplifies the transformative power of open source. Linux is rapidly becoming the dominant compute engine for the banking industry, whether on-premises (on-prem) or in the cloud. And open source technologies are increasingly prevalent across all levels of the technology stack, including databases, development tools, security components, and now agentic management. Some banks have gone all-in: notably, innovative banks such as Nubank, a Brazilian digital bank offering low-cost financing through a user-friendly app, have adopted 100% open source models.

FINOS has played a pivotal role in fostering collaboration and innovation within financial services through open source software, standards, and best practices. This year's State of Open Source in Financial Services Research report examines consumption patterns, contribution dynamics, governance structures, and cultural aspects, as well as the fast-evolving intersection of open source and generative AI (GenAI). It tackles ROI expectations for GenAI and examines the policies that either unlock or limit contributions to open source.

In banking's next chapter, open source and AI are on the same runway for reinvention. Based on our analysis, we believe GenAI will impact nearly 75% of the work in today's banks—changing nearly everything we do. Yet, the greatest impact may very well be in accelerating the move to open source. GenAI is already revolutionizing legacy system modernization by decoding and translating outdated code into modern languages, acting as a Rosetta Stone of sorts. Once decoded, the bridge to an open source–first bank is just a few steps away. The old banking world will increasingly look more like the Nubank world.

The banking industry has historically thrived on collaboration and shared interests. Since the establishment of the Society

for Worldwide Interbank Financial Communication (SWIFT), The Clearing House, Visa, and Mastercard, the industry has benefited from collective efforts. Banks rely on shared standards, such as Wi-Fi, to drive their infrastructure. Similarly, sharing the code that underpins these standards can yield significant benefits. The real opportunity lies in extending this collaborative approach further up the technology stack. As banks operate in an interconnected world, encompassing trading, payments, and underwriting, among other functions, sharing open source code can foster a more cohesive and efficient ecosystem.

In conclusion, I am confident that the future of banking is open source. As the industry continues to evolve, embracing open source will be crucial for banks to remain competitive, efficient, and innovative. I commend FINOS for its efforts in driving this change and embracing the art of the possible. I look forward to seeing the continued adoption and innovation in open source within the financial services sector.

Mike Abbott
Accenture

Executive summary

Organizational maturity: from playbooks to strategic practice

Financial services firms are steadily advancing in their open source maturity, evolving from unstructured adoption to strategic engagement. Nearly half of organizations now report having an open source program office (OSPO) or equivalent, and consumption is almost universally permitted (97%), reflecting a recognition that open source software (OSS) is critical for the industry. Contribution policies are becoming more permissive, with just 2% of firms saying contributions are not allowed, and organizations are allocating more time for engineers to participate upstream. However, policies are still applied inconsistently, due in part to unclear ROI and legal/licensing concerns, leading to uneven participation and costly outcomes, such as internal forks. Some risk management practices also lack maturity. While 52% of respondents cite security vulnerabilities as their top concern and 37% point to supply chain attacks, only 43% are actively producing software bills of materials (SBOMs).

The foundations for maturity are now firmly in place. Closing the gap between awareness and execution will require firms to further strengthen consumption and supply chain management, increase contribution enablement more broadly across the organization, and engage committed leadership that recognizes the strategic value of OSS and adequately champions and resources it.

Stronger together: community at the core of impact and value

Community is the engine of open source value. When diverse communities of adopters, contributors, and maintainers come together, they multiply benefits by improving quality, resilience, and long-term sustainability. Commercial models, from managed services to venture capital (VC)-backed offerings, reinforce this ecosystem, with evidence showing that healthier communities correlate directly with stronger valuations and growth. Respondents identified AI (49%) and cloud technologies (39%) as the most important open source technologies for the industry's future, underscoring the centrality of collaboration in fast-evolving domains. Beyond technology, 51% pointed to industry standards as the area where open source can deliver the greatest value, reducing duplication, enabling interoperability, and helping companies tackle shared challenges. While cost savings are significant, the true value extends into innovation, collaboration, and talent development, making open source a long-term strategic asset.

Community participation is no longer optional. Organizations must prioritize engagement, contribution, and collaboration with the open source communities important to them, not just to reduce risk but to realize the full value of open source.

Unlocking AI value: navigating momentum and maturity

AI is emerging as one of the most valuable open source technologies in financial services. For the third year in a row, respondents identified AI as the most valuable open source technology for the industry's future (49%), with top opportunities identified across standards (56%), open models (54%), and frameworks (52%). This reflects a rapid shift from early risk aversion to large-scale adoption, positioning GenAI as a foundational technology. The returns are beginning to materialize: 18% of firms already report measurable ROI, and another 22% expect to see returns within the next year. Respondents also pointed to enhanced developer productivity (49%) as the area where GenAI will have the greatest impact. Yet, challenges remain. The most significant barrier is no longer governance but skills, with 46% citing capability gaps as the biggest obstacle. This underscores the importance of investment not only in technology but also in talent development to realize AI's full potential.

KEY TAKEAWAY

Financial services firms must pair increasing investment in AI with deliberate talent and skills strategies while embracing open approaches that balance innovation with resilience.

Introduction

Why are banks all-in on open source? This report, the fifth in a series of annual financial services industry studies into open source software (OSS) and ecosystems, provides concrete evidence to help answer this question.

The insights from our research activities to date have grounded the work that many of us do within and beyond FINOS, informing organizational strategies, policies, and approaches across the sector. Whether exposing gaps or pointing to new opportunities, the data has consistently informed decision-making. By pursuing empirical evidence from industry experts, practitioners, and executives, we have been able to trace the clear progression of open source in financial services from early readiness to adoption to demonstrable ROI. This year's findings show just how far the industry has come, with 87% of respondents seeing open source as critical to their organization's future and 84% believing that it's essential to the overall sector.

Organizations are recognizing the cost savings of open source adoption, alongside benefits in software quality (93%), lower licensing costs (87%), and business value creation (89%). What began as a cost play has matured into a value play, with open source directly contributing to speed to market, regulatory success, and the ability to attract and retain technical talent. Projects such as GitProxy, FDC3, and other community-driven initiatives have become part of the production backbone of the world's leading financial institutions.

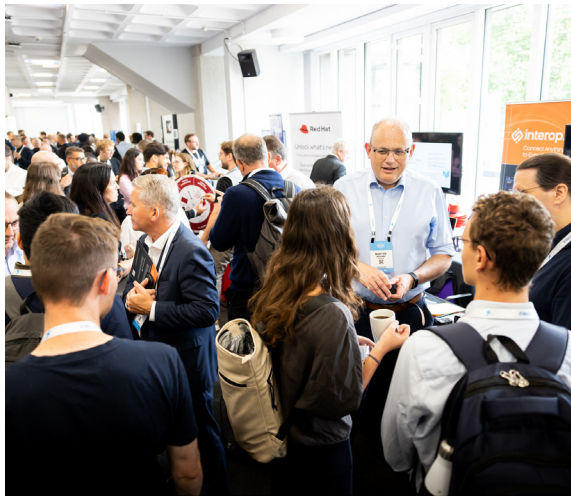
Maturity also shows in governance. Half of organizations now have a defined open source strategy, with nearly half implementing OSPOs. As centers of internal open source competence, these offices coordinate policies, streamline contributions, mitigate risk, and ensure that open source engagement links to enterprise goals. Larger organizations, in particular, are demonstrating higher engagement across all open source activities, showing that scale and maturity go hand in hand.

Contribution practices are shifting, too. Survey data reveals that nearly half of developers are spending more time contributing to open source than they did a year ago. Motivations range from giving back to the community (33%) to influencing critical projects (29%) to reducing technical debt (28%). These drivers reflect not only altruism but also strategic alignment with business needs. At the same time, barriers persist. Concerns over unclear ROI (48%) and legal complexity (48%) remain common, underscoring the importance of clear frameworks, standards, leadership, and knowledge translation.

In 2025, no discussion of technology in finance is complete without AI. Open source is already shaping the future of GenAI in the sector, from models to frameworks to standards. Nearly half (49%) of respondent organizations believe that AI will first deliver value in internal developer productivity, with ROI horizons of two to five years. Some (18%) are already realizing returns. Open ecosystems are key here, accelerating innovation while keeping costs in check.

Ultimately, the momentum is undeniable. Banks are all-in on open source because the data shows bottom-line benefits: better code, lower costs, stronger compliance, faster delivery, and a more resilient talent pipeline. However, equally important are the bonds formed across the industry.

It is the strength of the relationships among industry peers, forged through open source collaboration in FINOS and across the industry around shared challenges and purpose, that creates better technologies for all.



GitHub metrics show the scope of open source activity in financial services

In this section, we explore GitHub commit activity, finding that:

- **Financial services engagement in open source remains steady**, with unique financial services users rising to 9,354, representing modest growth year-on-year.
- **Activity is concentrated in institution-hosted projects**, with much of the observed contribution coming from repositories directly hosted by financial services organizations.
- **Python dominates as the language of choice**, accounting for ~18% of contributions, while traditional financial services languages, such as Java (7%) and C# (3%), rank lower.

In this section, we explore the open source activities of financial services organizations through publicly available data from GitHub. It is challenging to capture the full extent of open source interactions because, as we highlighted in last year's report, policies and restrictions often push developers to use their personal accounts when interacting with GitHub. However, despite these challenges, we observe interesting patterns in the available data.

GitHub provided the analysis in this section using a list of the FINOS-supplied email domains of over 400 of the largest financial services institutions (by revenue and/or assets under management), as well as those financial services organizations known to this group to be active or interested in open source. Data was included for GitHub users who made commits to any public repository with a primary email that matched an email domain in a FINOS-provided list or any users who were members of an organization that had a billing email with a domain in that same list.

This year, as shown in **TABLE 1**, we found that 9,354 employees from financial services organizations contributed to around 36,056 repositories, making a total of 774,732 commits. Looking at **FIGURE 1**, which shows the number of users and commits for the past five years, we can see that this year there has only been modest growth in each. Much of the activity we observe is related to projects (repositories) directly hosted by financial institutions, which is possibly a limiting factor. If financial services organizations move to a more permissive contribution model, we may see activity rise once again.

TABLE 1

GitHub repositories with a financial services email domain

	GitHub repositories with a commit from a financial services email domain		
Year	Unique repositories with financial services commits	Unique financial services users	Total commits by financial services users
2025	36,056	9,354	774,732
2024	35,788	9,247	751,259
2023	36,634	9,009	595,860
2022	36,107	8,552	535,974
2021	25,280	6,857	429,258

2021-2025 GITHUB DATA

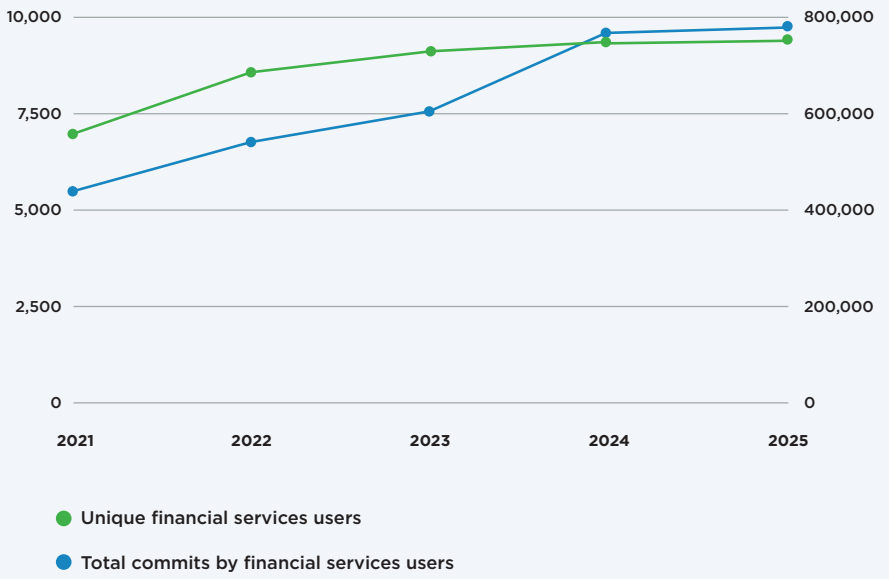
Of these ~36,000 repositories, the following have the greatest number of unique contributors, with each having ten or more (financial services) contributors:

- **oxcaml/oxcaml—** Jane Street's production OCaml compiler for performance-oriented programming
- **man-group/ArcticDB—** a high-performance, serverless DataFrame database
- **fidelity-contributions/open-telemetry-opentelemetry-python-contrib—** a fork for Fidelity's contributions to open-telemetry/opentelemetry-python-contrib
- **transferwise/tw-tasks-executor—** service cluster-wide asynchronous tasks executor
- **deckhouse/deckhouse—** a platform for managing Kubernetes clusters
- **Point72/csp—** a high-performance reactive stream processing library
- **finos/architecture-as-code—** a specification that enables software architects to define, validate, and visualize system architectures in a standardized, machine-readable format
- **bloomberg/blazingmq—** a distributed message queueing platform with a focus on efficiency and reliability
- **seb-oss/green—** an open source design system built by SEB

This is a relatively diverse set of projects, including design systems and UI components, compiler and IDE technology, databases, messaging, streaming, and observability frameworks.

FIGURE 1

Growth of financial services users and commit activity within GitHub

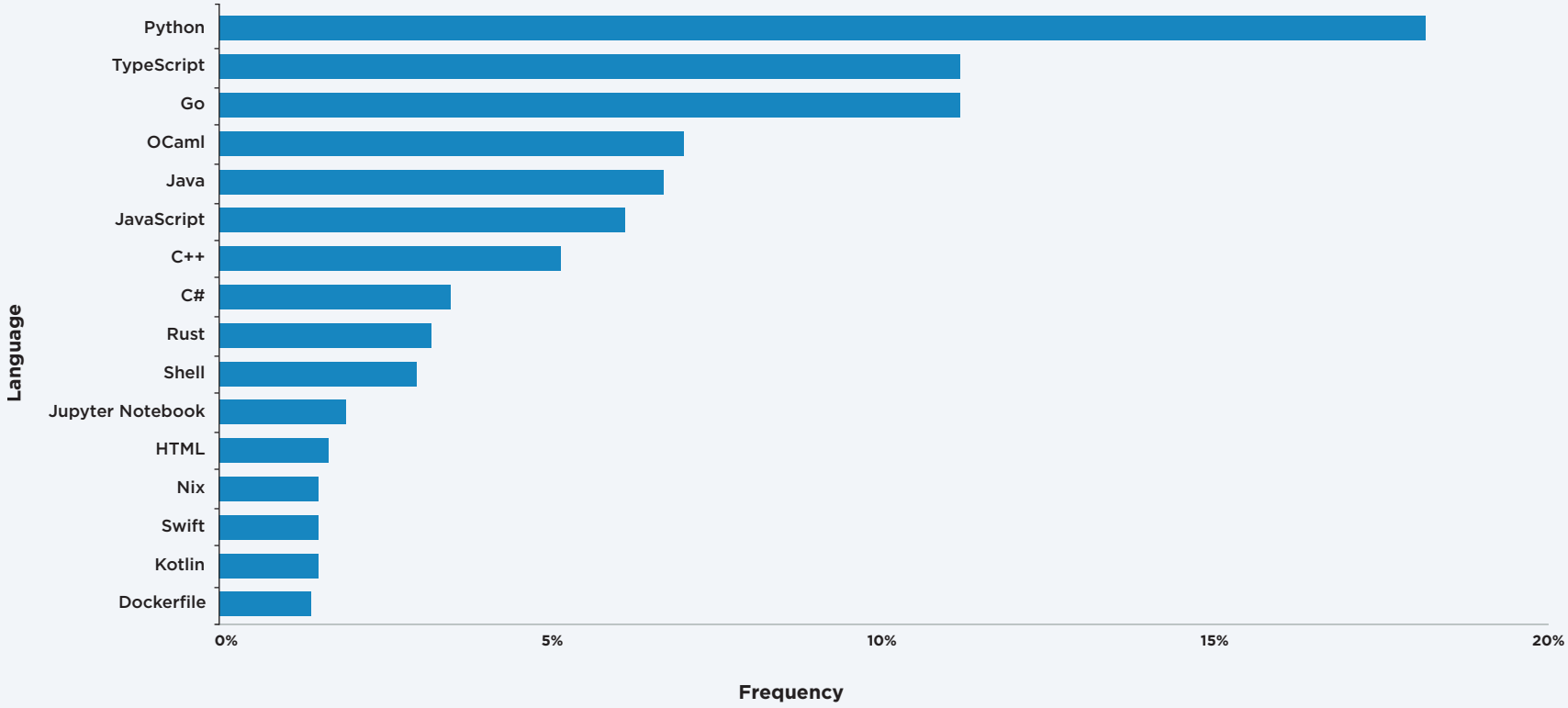


2021-2025 GITHUB DATA

FIGURE 2 shows the most widely used languages by financial services organizations contributing to open source, with Python coming out on top at around 18%. Meanwhile, we find the workhorse languages of financial services, Java and C#, are much lower down the list (7% and 3%, respectively). It is likely that the leading position of Python is driven by its dominance as a language for AI and data analytics.

FIGURE 2

Primary language of GitHub repositories with financial services committer activity



2025 GITHUB DATA

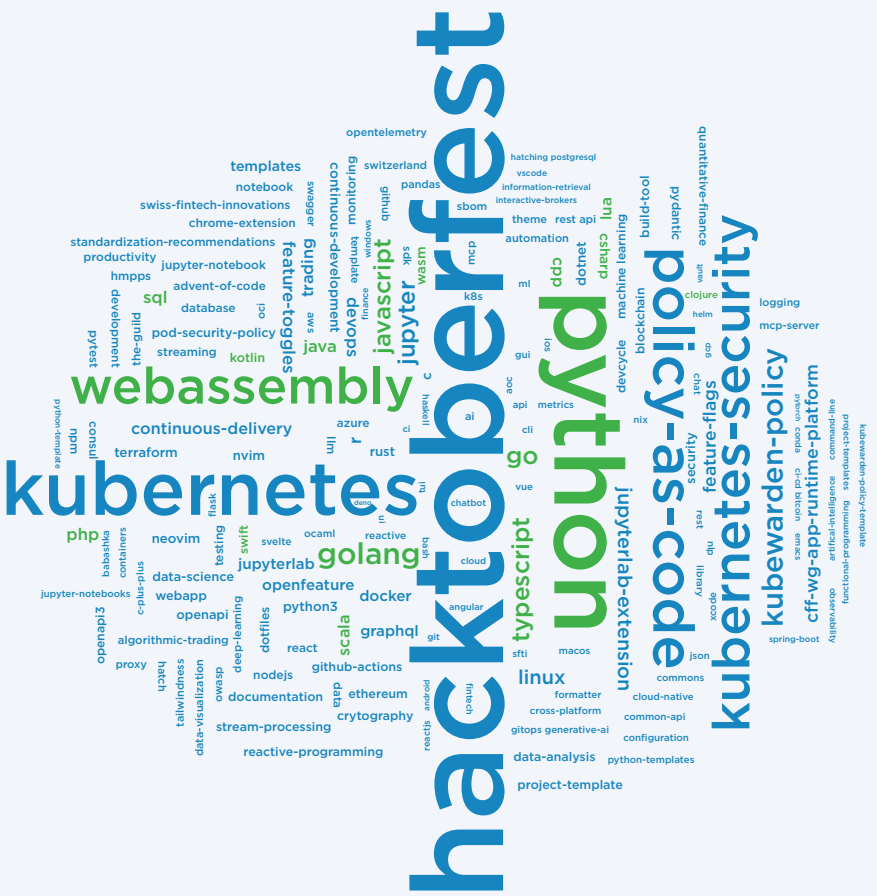
GitHub repositories are often tagged with keywords that describe their purpose. **FIGURE 3** shows the most frequently cited keywords across the 35,000 repositories that financial services users contribute to.

With this data, we observe the following trends regarding the types of projects that financial services organizations contribute to:

- **Cloud native and infrastructure—** The most frequent keywords in this dataset include `kubernetes`, `kubernetes-security`, and `policy-as-code`, together with other infrastructure-as-code-related keywords. This shows that financial services contributors are heavily engaged in container orchestration but with a strong tilt toward security and compliance.
- **Data, AI, and machine learning (ML)—** AI keywords include `machine-learning`, `ai`, `llm`, and `data-science`, together with `Jupyter` and `JupyterLab`, indicating an interest in AI/ML-related projects and interactive research and analytics.
- **Security and compliance—** Keywords include `security`, `pod-security-policy`, `cryptography`, and `owasp`, reflecting the sector's need to maintain regulatory compliance and secure infrastructure.
- **Finance-specific open source—** Finally, we see domain-specific keywords, including `finance`, `trading`, `algorithm-trading`, and `quantitative-finance`. Although these are present, they have a smaller share of contributions. This suggests organizations are more focused on enabling technologies (cloud, security, and DevOps) than domain-specific tooling.
- **hacktoberfest—** The most frequently cited keyword is nothing to do with a specific technology or problem domain. Instead, it indicates a willingness to participate in Hacktoberfest, an annual event which encourages open source contribution. This reflects the continued and varied efforts involved in encouraging active participation and contributions to open source.

FIGURE 3

Keyword frequency for GitHub repositories with financial services committers



2025 GITHUB DATA

Survey and interview findings

Measuring the industry's open source maturity and strategy

In this section, we find that:

- **Formalization is accelerating.** Nearly half of firms now report having an OSPO or equivalent structure in place, and 50% have defined an open source strategy, signaling a clear move from ad hoc adoption toward structured approaches.
- **Governance is advancing, but unevenly.** While most organizations now permit OSS consumption (97%) and many have evaluation processes, gaps remain in ensuring consistent policies, education, and alignment, leaving some firms at an early stage.
- **Organizations recognize risk but undermanage it.** Despite rising concern about vulnerabilities and attacks, fewer than half of organizations actively use SBOMs, highlighting a gap between awareness and action.
- **Contribution remains constrained.** Cultural and structural barriers still limit upstream engagement, stemming from unclear ROI, legal and licensing concerns, and governance challenges.
- **Leadership and influence matter.** CTOs, OSPOs, and developers play critical roles in shaping open source strategy, and their support and leadership help overcome cultural and compliance hurdles.

Strategic maturity

Across the financial services industry, we're witnessing new levels of maturity on a number of levels, illustrated by the extent and type of open source contributions.

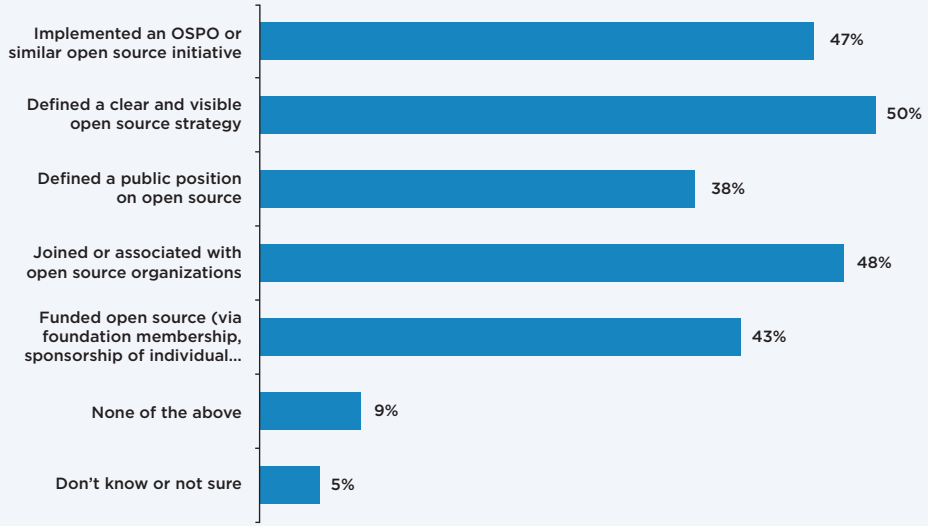
Open source adoption in financial services has continued to mature, with organizations now shifting their focus from foundational questions of whether to use open source toward a more strategic emphasis to how to operationalize, govern, and maximize its value. The 2025 survey findings show that maturity increasingly includes formalized strategies, leadership support, and external collaboration as firms move beyond ad hoc adoption toward structured approaches that embed open source into business and technology priorities.

As **FIGURE 4** shows, 47% of respondents in 2025 reported the presence of an OSPO or equivalent initiative, with financial institutions leading fintechs in adoption (55% vs. 38%). Alongside this, half of all respondents (50%) state that their organizations now have a defined open source strategy, demonstrating that firms are increasingly aligning open source practices with business priorities and risk frameworks.

FIGURE 4

OSS engagement across organizations

Which of the following actions has your organization engaged in regarding OSS? (select all that apply)



	Financial institution	Fintech or other
Implemented an OSPO	55%	38%
Clear and visible open source strategy	50%	51%
Public position on open source	34%	43%
Joined open source organizations	45%	53%
Funded open source	37%	49%
None of the above	14%	3%
Don't know or not sure	3%	8%

2025 FINOS SURVEY, Q11 BY Q7, SAMPLE SIZE = 209, TOTAL MENTIONS = 504

Organizational maturity is also reflected in how firms communicate their open source posture externally. In the survey, 38% of organizations overall report having a defined public position on open source, with fintechs slightly ahead of financial institutions (43% vs. 34%). Similarly, participation in open source organizations is rising, with 45% of financial institutions and 53% of fintechs reporting engagement. These actions not only strengthen transparency and credibility but also extend firms' influence in shaping open source across the industry. According to RBC Capital Markets managing director Elspeth Minty, participation in open source has reached new heights as team members assume prominent leadership roles within the FINOS board and community more broadly. "We've seen a real evolution—from just consuming open source to feeling confident in how we contribute back, and that extends to participating in governance."[1]

Direct financial support for open source is another critical marker of maturity. This year, 43% of respondents overall indicate that their organizations provide funding through

[1]Interview with Elspeth Minty, July 9, 2025.

foundation memberships, sponsorships, or contributor programs. Fintechs (49%) are more likely than financial institutions (37%) to make these investments, signaling a growing recognition that sustainability requires active stewardship of shared technologies.

Maturity also extends past governance to leading in the development of innovative projects. For James McLeod, open source lead at NatWest, organizational maturity among banks in open source is more evident today than in days past. He says, "I do see maturity increasing in open source within financial services, as banks are starting to take the lead on projects rather than tech vendors taking the lead and then inviting the banks in."[2] When firms enable and encourage collaboration (a sign of open source maturity), it not only increases their influence but also inspires employees. As Mimi Flynn, software engineer and open source advocate at Morgan Stanley, explains, "Having opportunities to contribute to external projects is still motivating and inspiring. It also reinforces why hands-on coding remains so important."[3]

Despite encouraging progress, challenges remain, as 14% of financial institutions and 3% of fintech respondents report that their organizations have not yet taken any of the listed maturity actions. A further 3% of financial institutions and 8% of fintechs are unsure of their firm's approach. These figures highlight ongoing cultural and organizational barriers, suggesting that while leading firms are advancing quickly, a meaningful segment of the sector has yet to begin its maturity journey in open source.

From consumption to contribution through policy and practice

Implementing appropriate policies, processes, and tools to manage open source selection, usage, and contribution is foundational for increasing open source maturity and unlocking its value and benefits. However, having to write open source policies for the first time can be a barrier to both using and contributing to open source, especially for new organizations just beginning their journeys. Organizations such as FINOS have made this first step easier. As NatWest open source lead James McLeod reflects, "Because other banks within the FINOS membership have published their open source policies, we've been able to learn from their approach."[4]

This year's data on consumption policies **(FIGURE 5)** shows that the industry is more openly encouraging open source consumption than ever before, and only 1% now say that it's not permitted.

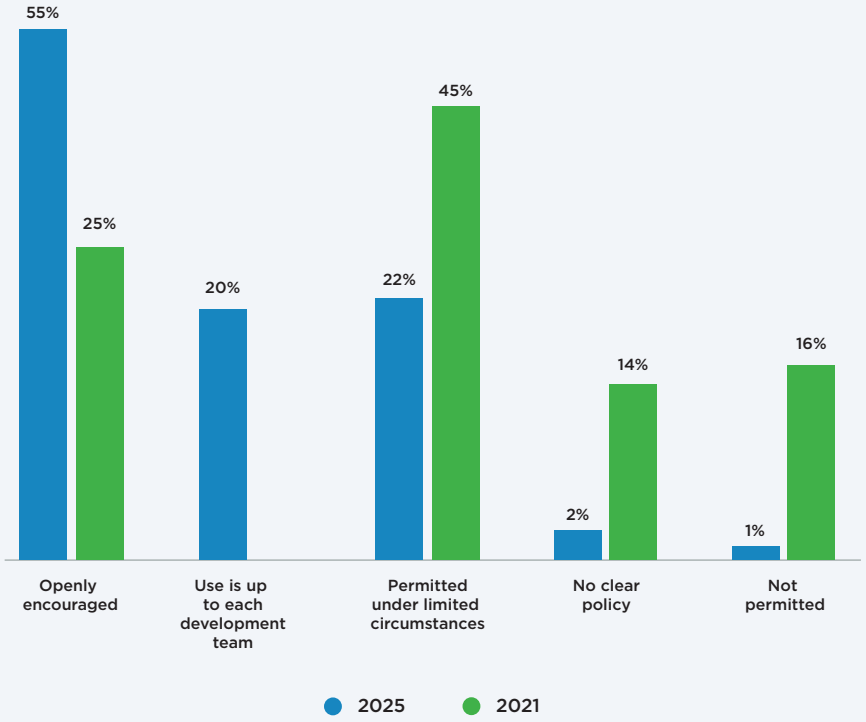
This shows a wider recognition of what those close to open source in the industry have known for years, that every organization is using open source (even if 1% still say it's not permitted). As Brian Fox, CTO at Sonatype, who has been working in this space for nearly 30 years, explains, "There were cases in the early days where the leadership didn't understand how much open source was being used. They would tell us they weren't using open source. What I think they meant was major open source systems like Linux, Open Office, or Firefox, not understanding that open source was being used to actually build their own applications."[5]

[2] Interview with James McLeod, July 29, 2025.
[3] Interview with Mimi Flynn, July 7, 2025.
[4] Interview with James McLeod, July 29, 2025.
[5] Interview with Brian Fox, August 11, 2025.

FIGURE 5

Policy on OSS use in organizations

To what extent is the use of OSS permitted in your organization? (select one)



2025 FINOS SURVEY Q22, SAMPLE SIZE = 204 (DKNS EXCLUDED)
2021 FINOS SURVEY Q21, SAMPLE SIZE = 117 (DKNS EXCLUDED)

Organizations are increasingly implementing governance around OSS **(FIGURE 6)**. Nearly half now have processes for evaluating components (46%), guidance on using OSS (42%), and tooling to implement policies and processes (42%), supporting our assertion that organizations are maturing in their practices.

FIGURE 6

Practices around OSS use

What practices does your organization follow regarding the use of OSS? (select all that apply)

2025 FINOS SURVEY, Q24, SAMPLE SIZE = 202, TOTAL MENTIONS = 504, FULL DATA IN APPENDIX A1

The importance of carefully selecting and managing OSS cannot be overstated. Without visibility, organizations risk exposure to unknown vulnerabilities, untracked dependencies, shadow code, licensing noncompliance, abandoned code, and package hijacking, all of which can lead to security breaches, reputational damage, increased technical debt, and fines. These risks are well documented in reports from organizations including Blackduck,[6] Sonatype,[7] and FossID.[8]

Managing these risks begins with ensuring you have adequate policies and processes to understand what OSS is in use within your organization. As Dietmar Fauser, chief information officer (CIO) at Symphony, shared,

[6] https://www.blackduck.com/content/dam/black-duck/en-us/reports/rep-ossra.pdf
[7] https://www.sonatype.com/state-of-the-software-supply-chain/2024/risk
[8] https://fossid.com/articles/what-you-dont-know-can-hurt-you-open-source-compliance-surprises-from-real-audits/

"We keep a close eye on the tendencies of adoption levels to ensure that we are not alone when we use something. And we make conscious choices, not just letting open source sneak in because the developer found it cool to use a library."[9] As is the case for many fintechs, OSS is deeply strategic for Symphony, which uses open source or enterprise-supported OSS at the core of what they are doing and at all levels from the front end to deep database technology in the back end. Given how deeply embedded OSS is across the industry, organizations should manage it with the same level of governance and process that they apply to proprietary and licensed software, including understanding and addressing any specific risks.

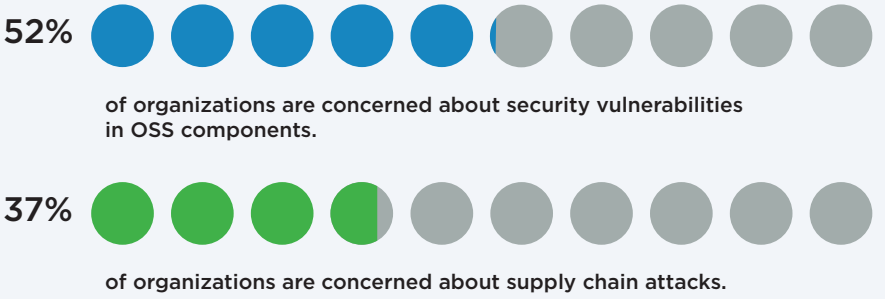
The industry is waking up to the reality of OSS supply chain risk, but recognition hasn't yet translated into the systematic actions necessary to close the gap. Matt Barrett, CEO of Adaptive, very succinctly points out, "There's growing discomfort and awareness that OSS supply chain risks need better management, even for internally hosted systems. But recognizing the risk doesn't always translate into budget or action. We're not yet seeing the kind of top-down mandates that drive real change."[10]

Our survey results largely support Mr. Barrett's assertion **(FIGURE 7)**. They show that 52% of respondents are concerned about security vulnerabilities, yet only 37% are worried about supply chain attacks. As shown in **FIGURE 8**, fewer than half of the organizations report actively producing (43%), requiring (34%), integrating (30%), attesting to (29%), or consuming (28%) SBOMs. A significant number of individuals indicated that they don't know whether their organizations are undertaking these practices at all, a gap that further underscores the need for increased resources and focus. The silver lining is that an almost equal number of respondents report that their organizations are beginning to adopt these SBOM processes, indicating that growing awareness is starting to translate into action.

FIGURE 7

Organizational concerns about open source

Which open source issues are you most concerned about? (select up to three responses)

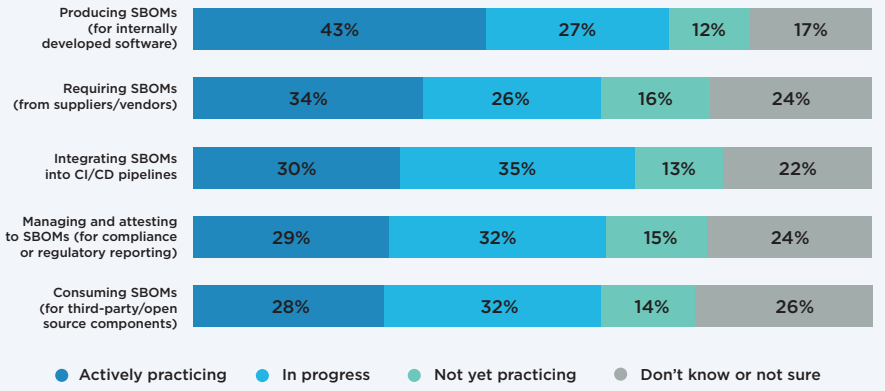


2025 FINOS SURVEY, Q27, SAMPLE SIZE = 209, TOTAL MENTIONS = 505, FULL DATA IN APPENDIX A2

FIGURE 8

SBOM adoption levels

How would you describe your organization's current level of adoption for the following SBOM practices? (select one response per row)



2025 FINOS SURVEY, Q26, SAMPLE SIZE = 209

[9] Interview with Dietmar Fauser, June 24, 2025.
[10] Interview with Matt Barrett, July 7, 2025.

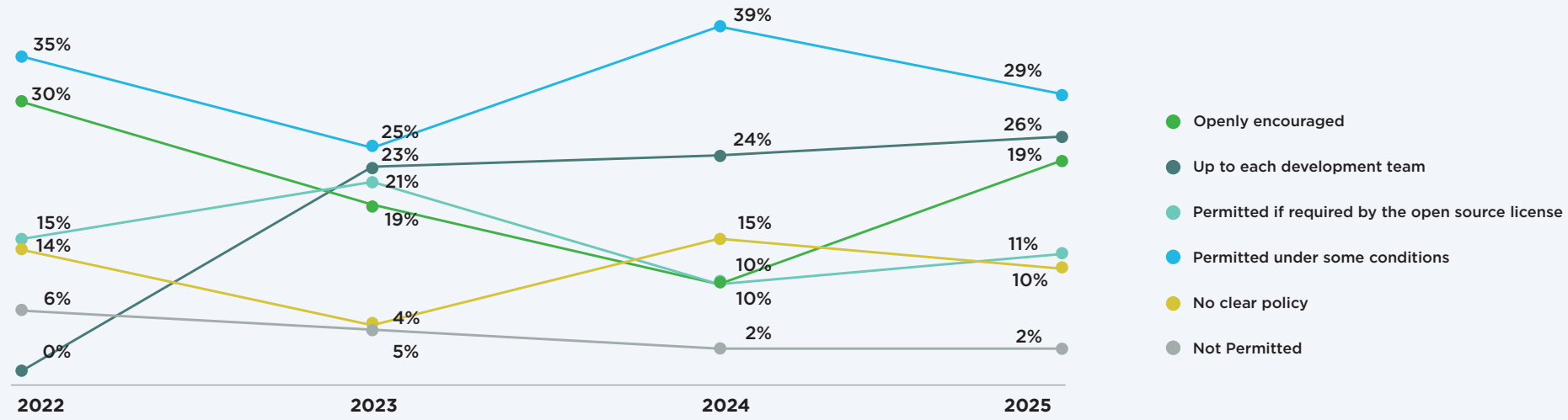
One technology leader at a large asset management firm highlights another value to producing SBOMs: "Having an SBOM is essential for understanding your stack, even if you're not contributing to open source. You really have to do this. But once you have that visibility, it also helps identify where you should be contributing. If you're using something like OpenTofu every day, it makes sense to be part of that community. That's part of the cultural shift: moving from broad, disconnected use to contributing to the tools you rely on most."[11]

Contribution policies remain mixed and nuanced in the industry. There is a general, albeit modest, shift toward permitting contribution, with only 2% reporting that they do not permit contribution. However, how and when organizations permit contribution continues to vary significantly from year to year **(FIGURE 9)**. Our respondents also report that their organizations allocated more time over the previous year (48%) for them to contribute to open source **(APPENDIX B1)**. This suggests that while firms are beginning to allocate more time for open source work, inconsistent policies and practices still create uncertainty. Until contribution is governed by clearer, more consistent frameworks, participation will remain uneven and fragmented across the industry.

FIGURE 9

OSS contribution policies from 2022 to 2025

What statement is closest to your organization's policy on contributing to open source projects? (select one)



2022, 2023, 2024, 2025 FINOS SURVEYS Q20, Q19, Q25, Q29, SAMPLE SIZE = 191, 313, 249, 203 (DKNS EXCLUDED)

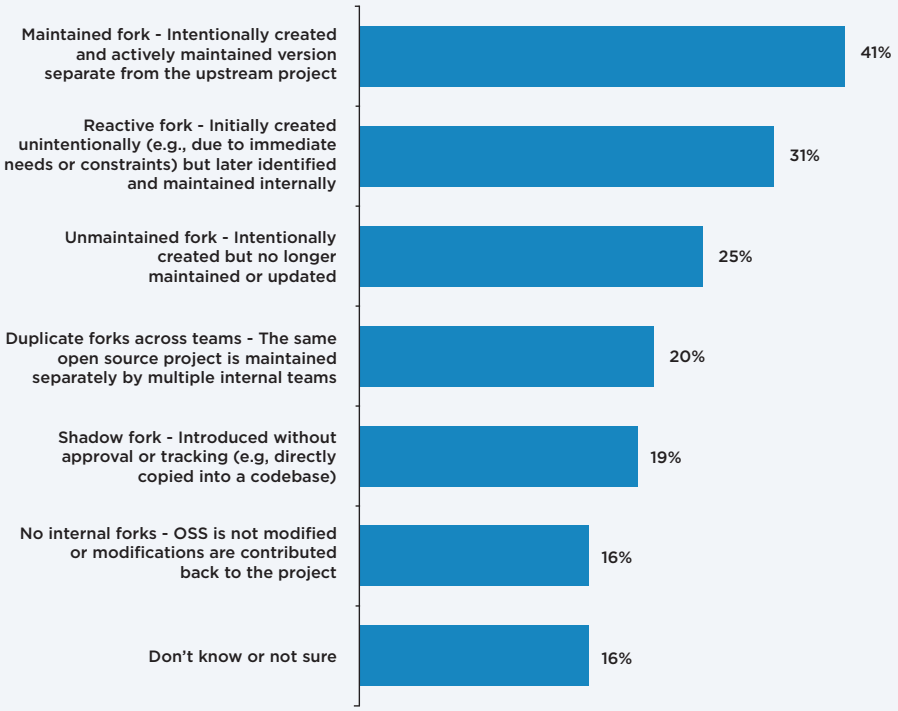
[11] Interview with technology leader, June 26, 2025.

One unintended consequence of restrictive contribution policies is the creation of unintentional forks. Forking is a natural part of open source, but when forks are maintained independently without a clear strategy, they drive up costs, increase technical debt, duplicate effort, and introduce security risks. Survey data **(FIGURE 10)** shows that forks occur in multiple forms: intentional, independently maintained forks (where there is a large discrepancy between financial institutions at 46% and fintechs at 34%) **(APPENDIX B2)**; unintentional, unmaintained forks; and even cases where multiple teams within the same organization independently maintain internal forks of the same software (20%).

FIGURE 10

Forking practices in organizations

Which of the following practices occur in your organization if OSS is modified to meet internal needs? (select all that apply)



2025 FINOS SURVEY, Q28, SAMPLE SIZE = 202, TOTAL MENTIONS = 337

A practical way to reduce fork-related risks while policies and processes mature is to prioritize contributions in the areas most critical to your organization. This requires careful evaluation of open source consumption and alignment with strategic initiatives; maturing policies and processes should go hand in hand with creating opportunities for contribution. This will help organizations avoid unnecessary forks while strengthening the upstream projects they rely on.

Elspeth Minty reinforces this point, naming a specific FINOS project, which captures collective best practices to streamline contribution across financial services. She says, "One of my favorite FINOS projects is git-proxy because it's a fantastic example of how open source should work. It takes all the accumulated knowledge, best practice, and experience from all these big financial firms, including RBC, and distills it down into this piece of code that we can all use."[12]

[12] Interview with Elspeth Minty, July 9, 2025.

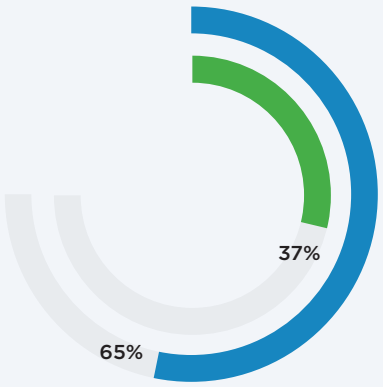
Policies work best when everyone knows them.

Breaking down responses by respondents' familiarity with open source, we see several discrepancies in the knowledge of policies and processes between those who are *very familiar* with their organization's approach to open source and those who are *familiar* or *somewhat familiar* **(FIGURE 11)**. While not surprising, it is a clear reminder that it is necessary for organizations to ensure that they clearly and continually inform employees about policies, processes, tools, and resources related to open source.

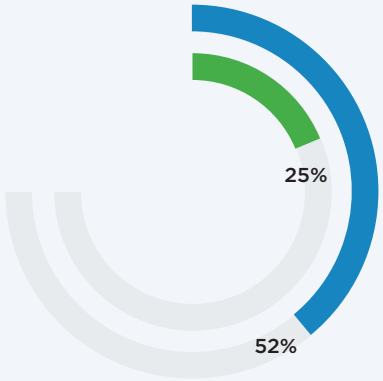
FIGURE 11

Knowledge discrepancies in OSS policies across familiarity levels

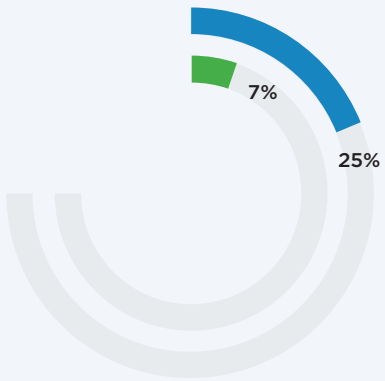
% of respondents indicating that **use of OSS is openly encouraged**



% of respondents indicating that they have **tooling to implement OSS policies**



% of respondents indicating that **contributions are openly encouraged**



- Very familiar
- Somewhat familiar & familiar

2025 FINOS SURVEY, Q22, Q24, Q29 BY Q3, SAMPLE SIZE = 202-209, FULL DATA IN APPENDIX A3-A5

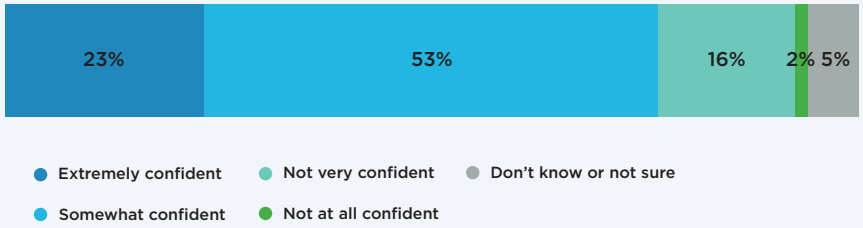
What are the barriers and challenges holding the sector back?

Open source adoption in financial services has matured, yet firms continue to face significant barriers that limit their ability to fully realize its value. As we've discussed, security and compliance remain pressing obstacles, with nearly half of respondents citing concerns over vulnerabilities, supply chain attacks, and regulatory obligations. While tooling such as SBOMs and secure dependency management is gaining traction, the gap between confidence and reality persists.

FIGURE 12

Confidence in the ability to identify and remediate OSS vulnerabilities

How confident are you in your organization's ability to identify and remediate outdated or vulnerable OSS components in your production systems? (select one)



2025 FINOS SURVEY, Q25, SAMPLE SIZE = 202

Confidence in identifying and remediating vulnerable OSS components highlights this disconnect. **FIGURE 12** shows that just over half of respondents (53%) reported being *somewhat confident*, and only 23% felt *extremely confident*. Meanwhile, nearly one in five expressed low confidence or uncertainty. These results show that even as security practices expand, many organizations lack the consistent operational maturity to address vulnerabilities at scale. The challenge is compounded by resource constraints, smaller firms in particular report difficulty balancing innovation with the overhead of risk management and compliance.

Cultural and structural barriers further complicate open source engagement. As shown in **FIGURE 13**, nearly half of respondents agreed that the lack of a clear ROI (48%) and legal or licensing concerns (48%) limit their ability to contribute upstream. Policy gaps, fear of leaking intellectual property (IP), and technology constraints reinforce this hesitancy. Developers also report inconsistent organizational support, with some firms permitting contributions only under restrictive conditions. This not only limits collaboration but also adds technical debt when patches cannot be upstreamed. New governance challenges are emerging as friction points as firms attempt to extend traditional oversight models to cover rapidly evolving technologies.

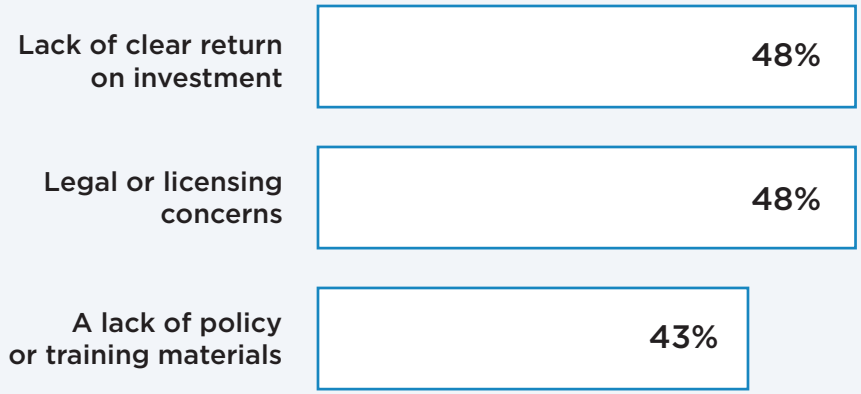
> *"The biggest barrier has been the perception that open source is somehow riskier or less professional than proprietary approaches. To overcome that, we've focused on education, clear policies, and celebrating early wins. When teams see successful examples in action, it starts to shift the narrative."*
>
> ***- Mark Paulsen,*** *Head of OSPO, TD Bank*[13]

[13] Interview with Mark Paulsen, July 1, 2025.

FIGURE 13

Barriers to open source contribution

Organizations' willingness to contribute to open source is limited by:



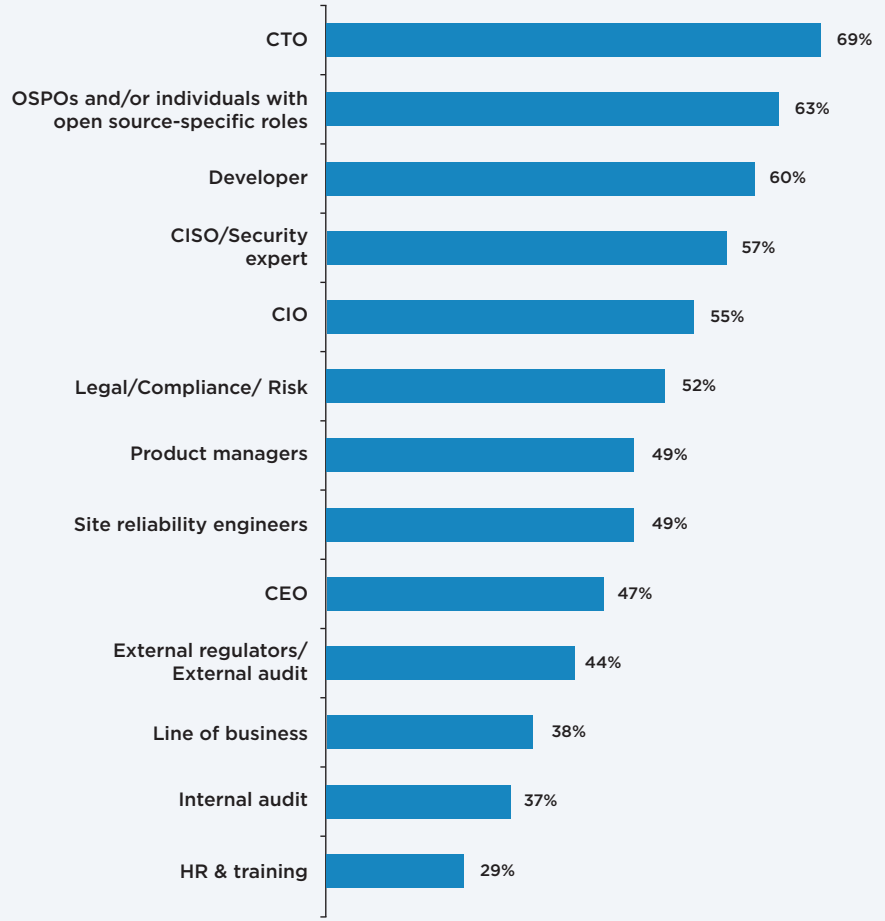
2025 FINOS SURVEY, Q33, SAMPLE SIZE = 202, % OF "AGREE", TOP 3 SHOWN, FULL DATA IN APPENDIX A6

Finally, leadership and influence play a critical role in shaping open source strategy. **FIGURE 14** shows that respondents identified CTOs (69%), OSPOs or open source–specific roles (63%), and developers (60%) as the most influential stakeholders, followed by CISOs and CIOs. By contrast, external regulators, audit functions, and HR were seen as less impactful. This concentration of influence underscores the importance of executive sponsorship and dedicated OSPO resources in overcoming cultural and compliance hurdles. Without them, progress risks being slowed by fragmented governance and limited budgets. Addressing these barriers, through stronger education, clearer contribution frameworks, and modernized risk oversight, will be essential for enabling financial institutions to fully capture the benefits of open source.

FIGURE 14

Roles with the most influence on open source direction

Do you agree or disagree that each of the following influence the direction of open source in your organization: (select one response per row)



2025 FINOS SURVEY, Q12, SAMPLE SIZE = 209, % OF "AGREE"

Community as the accelerator to value and impact

In this section, we find:

- **Motivations for contribution are strategic.** Financial institutions contribute to give back, gain influence over critical projects, strengthen their talent pipelines, and reduce technical debt.
- **The open source community and collaboration multiply value.** Open source delivers its greatest benefits when communities of contributors and adopters bring diverse skills, perspectives, and scrutiny, improving quality, resilience, and long-term sustainability.
- **Commercial models are valuable to the ecosystem.** From managed services to productized offerings with service-level agreements (SLAs), commercial open source software (COSS) creates tangible business value, with healthier communities driving higher company valuations and stronger growth outcomes.
- **Open standards create value through collaboration.** Reducing duplication, enabling interoperability, and creating common frameworks help financial institutions cut costs, improve resilience, and accelerate innovation across domains from trading desktops and climate risk to data and DevOps.
- **Open source delivers measurable savings and broad benefits.** Nearly half of firms report saving more than $500,000 annually from OSS and recognize benefits that extend well beyond cost into talent acquisition and retention, innovation, and collaboration.

Community drives value

At its core, open source is about collaboration and community. The most successful and valuable open source projects and standards benefit from a diverse, active group of adopters, contributors, and maintainers who provide varied insights, a high degree of scrutiny, and redundancy that increases the longevity and utility of projects. Ultimately, the richer and more engaged the community, the greater the value open source can deliver.

This year's survey data in **FIGURE 15** reinforces that point. Among financial services organizations, the top motivations for contributing to open source ranged from giving back to the community and attracting talent to influencing the direction of projects and reducing technical debt. A senior technology leader explains how these motivations are connected, "From a talent perspective, open source contribution has become very important. People want to contribute to something bigger than themselves, and they want to work in organizations that support that. When you consider that 90% of your software stack runs on open source, it becomes clear that open source needs to be part of how you run your business and part of your strategy."[14]

[14] Interview with technology leader, June 26, 2025.

FIGURE 15

Top motivations for contributing to open source

What are your organization's top motivations for contributing to open source? (select up to three responses)

1. Give back to the community (33%)
2. Influence direction of critical projects (29%)
3. Lower technology risk and reduce technical debt (28%)
4. Attract and retain the best talent (27%)
5. Public relations/thought leadership (27%)
6. Save time otherwise spent on maintaining a fork of an OSS project (23%)
7. Improve system reliability or security (22%)
8. Reduce integration burden (14%)

2025 FINOS SURVEY, Q32, SAMPLE SIZE = 209, TOTAL MENTIONS = 461

Engaging in open source communities, particularly in areas where organizations are large consumers of open source, is also important. Many individuals we spoke with discussed the importance of knowing your community and getting involved, as it takes time to build trust, earn a role as a maintainer, influence the direction of a project, or even simply to de-risk your reliance on open source components. James McLeod of NatWest articulates the value of participants influencing the technical direction of projects. He says, "The strategic influence of open source projects is definitely starting to be realized. Even if you can't reduce the cost, you can influence the roadmap at the commit level so you're not completely downstream of a tech vendor."[15]

Eddie Knight, OSPO lead at Sonatype, also explains how community is important for building secure software: "Trust comes from more than secure code; it comes from knowing how to work with the projects you rely on. If enterprises can't reach maintainers and maintainers can't show the security work they've done, even the best processes won't translate into confidence."[16]

Thriving open source communities rely on dynamic ecosystems of individuals and organizations, each playing vital roles. As we've discussed, not all organizations are in a position to contribute code back to the open source projects they use, so communities are also essential for connecting open source consumers with maintainers, offering access to expert support and services, and enabling sustainable commercial models built around OSS.

Within financial services, we see a variety of commercial models in play. Some firms adopt managed services to reduce operational overhead and benefit from production-tested reliability. As Dietmar Fauser describes, "We have a fundamental policy that says if there are managed services available, by a good partner and at an acceptable price, we go for it. We are not a large firm, so this helps us reduce the number of people we need to operate the platform. You get the operational benefits of people doing this at scale, and you get the versions of the open source libraries that are typically tested in relatively real production-type setups."[17]

Other financial institutions turn to consultancies or fintechs that can contribute on their behalf, co-create new projects or standards, build custom solutions from existing open source code, or provide ongoing support for open source initiatives.

[15] Interview with James McLeod, July 29, 2025.
[16] Interview with Eddie Knight, August 11, 2025.
[17] Interview with Dietmar Fauser, June 24, 2025.

As Matt Barrett of Adaptive explains, "Some firms are looking for production-ready capabilities with SLAs and support, essentially a productized form of open source. That's one place where commercial value around open source exists."[18]

We are also seeing increasing value from VC-backed COSS, as The State of Commercial Open Source 2025[19] reports, drawing on 25 years of venture data from 800 VC-backed startups. Taking us back to the value of community, research in the report "demonstrates a direct and strengthening link between the health of an OSS community and the financial success (valuation and venture capital funding) of the company built around it."

Success requires participation at all levels, from all areas, and a goal of ensuring that everyone involved can find value. Community participation is not altruistic; it's core to the competitiveness, resilience, and long-term success of the open source projects and standards. Mark Paulsen summarizes this well: "Long term, I'd love to see open source woven into the fabric of everything we do, from product development to community engagement. It's not just about code. It's about building trust, transparency, and shared purpose with our peers and the broader ecosystem."[20]

In Their Words: The Value of Community Events

Community events provide numerous benefits to the open source community at all levels of maturity, including offering knowledge sharing and education, building trust and relationships, and providing practical hands-on experiences.

"We use something called 'jams' to drive contribution and community. It's one way we bring together people who are all working on the same project, even if they're on opposite sides of the organization. It creates a space to share what we're doing, learn from each other, and build connections. It's not just about the code; it's about creating those threads that strengthen both our internal community and our influence in the wider open source ecosystem."[21]

"Community events are important for us, for both engagement and validation. Developers show up and tell us they're running Aeron in production, which we might not otherwise know. And when our clients attend and see the broader ecosystem and activity, it reinforces that they're making the right bet. It turns open source into something real and investable."[22]

"Events are extremely valuable. There's definitely a strong desire for people to attend them now, as more and more engineers are allowed to go."[23]

[18] Interview with Matt Barrett, July 7, 2025.
[19] https://www.linuxfoundation.org/research/2025-state-of-commercial-open-source
[20] Interview with Mark Paulsen, July 1, 2025.
[21] Interview with technology leader, June 26, 2025.
[22] Interview with Matt Barrett, July 7, 2025.
[23] Interview with James McLeod, July 29, 2025.

Opportunities across the stack

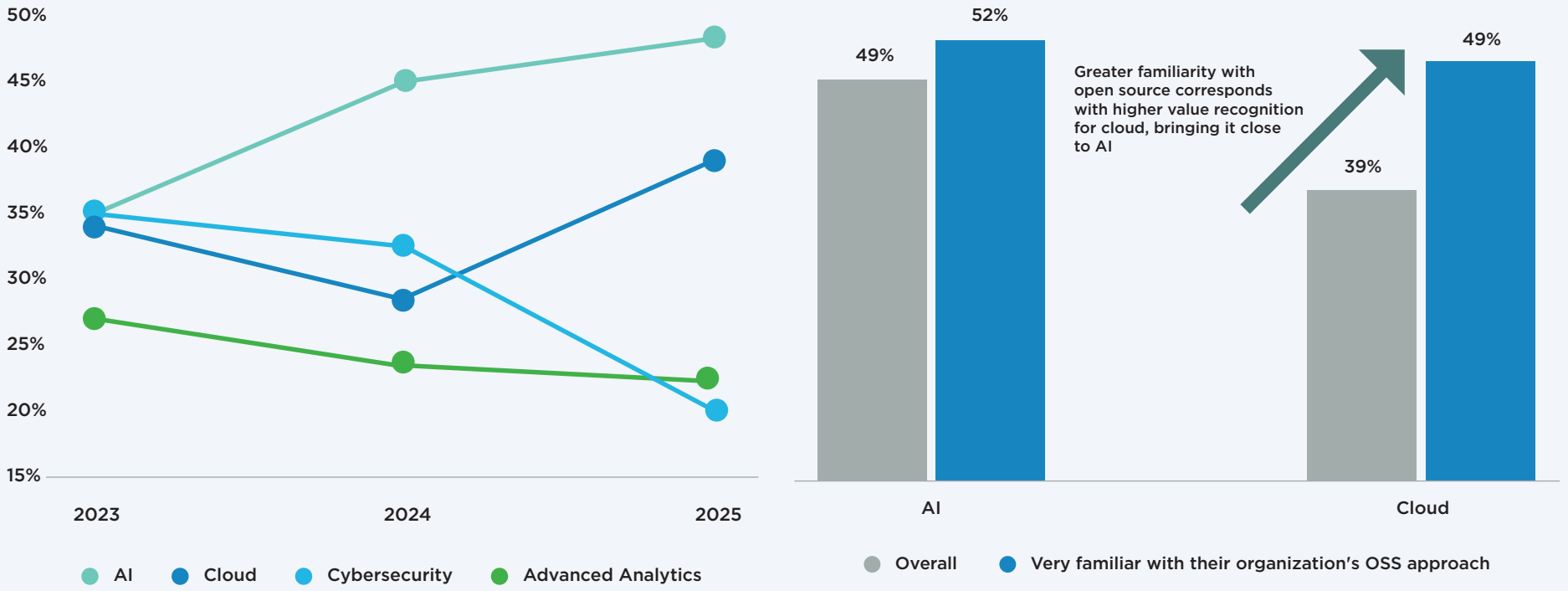
In our survey, we explore where respondents believe open source is most valuable to the industry, approaching this from two slightly different angles: asking about specific open source technologies and in which areas collaboration can deliver the most value.

Looking first at open source technologies **(FIGURE 16)**, AI has been in the top three since the inception of our survey and has ranked in the top spot for the last three years. We look at AI growth, opportunities, and challenges later in the report.

FIGURE 16

Top open source technologies for the industry

Which open source technologies do you feel are the most valuable to the future of the financial services industry?



2023-2025 FINOS SURVEYS, Q36, Q14, Q16, SAMPLE SIZE = 324, 249, 209, TOTAL MENTIONS = 861, 683, 571, FULL DATA IN APPENDIX A7
2025 FINOS SURVEY, Q16 BY Q3, SAMPLE SIZE = 209, TOTAL MENTIONS = 571, FULL DATA IN APPENDIX A8

Cloud (and associated technologies) has also consistently ranked in the top three, and respondents who are very familiar with their open source policies ranked AI and the cloud almost equally (52% and 49%, respectively) **(FIGURE 16)**. The importance of AI and the cloud to the industry is reinforced by the GitHub data presented earlier, which shows that the most common keywords in open source projects with financial services contributors were cloud-related, followed by AI-related.

Accenture's research report "Top 10 banking trends in 2025 and beyond"[24] predicts that "open-source systems—on-prem and in the cloud—will become the foundation of banking infrastructure, driving innovation, reducing costs, and enhancing security." The report encourages organizations to "adopt a cloud-first mindset. Standardize your operations to work seamlessly across both on-prem and cloud environments."

Financial institutions often use multiple cloud providers and environments to address operational resilience, data security, data residency, and regulatory reporting requirements. The 2024 CNCF survey[25] confirms this trend across industries, with 78% of respondents using multiple cloud service providers (CSPs). Further, the majority (59%) use a mix of on-prem data centers and public clouds.

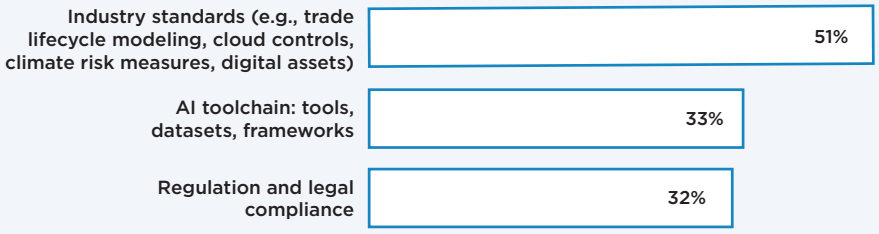
For financial institutions, working with multiple CSPs means recreating the same security and compliance artifacts again and again. While different CSPs may offer similar features, each has its own proprietary controls and processes. This fragmentation can result in duplicative effort, higher costs, and increased compliance risk. One area where the industry is working together to tackle this challenge is the open source Common Cloud Controls project,[26] which tackles this fragmentation by providing a unified, cloud-agnostic control framework. It is backed by major financial institutions, including Citi, Morgan Stanley, BMO, and LSEG, and foremost cloud providers, such as Microsoft, Google Cloud, and AWS. The project recently announced an integration with the open source AI governance framework[27] to help ensure that emerging AI-related risks and controls are incorporated, giving firms a sustainable way to strengthen security, reduce duplication, and scale compliance across both cloud and AI services.

Turning to specific areas of collaboration, **FIGURE 17** shows that 51% agree that the industry can derive the greatest value from collaboration on industry standards. They are critically important across the financial services industry, and, as Elspeth Minty says, "Standards just make things easier. If we're all producing data and sending it to each other in a consistent way, it just becomes easier for everyone in the industry to deal with it."[28]

FIGURE 17

Greatest value from open source collaboration

In which areas can the financial services industry derive the greatest value from open source collaboration? (select up to three responses)



2025 FINOS SURVEY, Q17, SAMPLE SIZE = 209, TOTAL MENTIONS = 523, TOP 3 SHOWN, FULL DATA IN APPENDIX A9

[24] https://www.accenture.com/us-en/insights/banking/top-10-trends-banking-2025
[25] https://www.linuxfoundation.org/hubfs/Research%20Reports/cncf_annual_survey24_031225a.pdf?hsLang=en
[26] https://github.com/finos/common-cloud-controls
[27] https://github.com/finos/ai-governance-framework
[28] Interview with Elspeth Minty, July 9, 2025.

For this reason, the financial services industry has relied on standards for centuries to improve operations, reduce errors, increase interoperability, and accelerate transactions. In the 19th century, inventions such as the ticker tape (1867) enabled uniform, democratized reporting of stock prices. The telex networks of the 1920s and 1930s were the original electronic communication method for banking, paving the way for SWIFT to create a shared, encrypted network with standardized message formats and protocols in the 1970s. Collaborative efforts continued to build on existing standards and deliver new ones, including the FIX Protocol (1987) for electronic trading, ISO 20022 (2004) (a modern global financial messaging standard), PCI DSS (2004) for secure card payments, and XBRL (2000s) for financial reporting.

This long tradition of financial standards continues, with open standards in financial services advancing in numerous domains where consistency, interoperability, and shared perspectives deliver real business value. Open source standards address a range of opportunities, including financial desktop interoperability (e.g., FDC3 for financial desktops), data and reporting (e.g., CDM for trade lifecycle management and regulatory processes), and DevOps and infrastructure practices that standardize deployment and operational tooling. CALM (the Common Architecture Language Model) is part of this evolution, moving architecture off whiteboards and into code. As Matthew Bain, a Distinguished Engineer at Morgan Stanley, explains, "Our intent was to make architecture an integral, concrete part of the SDLC, something that drives developer productivity, lowers friction in the development cycle, and reduces risk by enabling measurable controls."[29]

The industry is also recognizing the value of moving to truly open standards. As Paul Hands, CTO of Parallel 51 and Document Risk Solutions, explains, "CDM becoming open source made a real difference. It stopped being someone else's model and became something we could work with and contribute to. That shift was key to us deciding to invest time and effort."[30] Engaging additional community participants also expedites expansion into new areas and segments, such as the CDM expanding to tokenized assets and physical risk.

Among the examples of industry standards that respondents cited as a value point in the survey are climate-risk measures. Managing risk of all kinds is important to financial services organizations, but climate-risk measures improve fund managers' ability to make portfolio management and other types of investment and underwriting decisions in the face of physical and market risk from adverse weather events. The insurance industry, in particular, has had to face challenges adapting to damages from floods, wildfires, and windstorms.

In this context, the "value in standards" opportunity lies in improved climate risk modeling to achieve more resilient financial markets—an equal benefit to all. According to Steven Tebbe of OS-Climate, "We're building the neutral, open source infrastructure that allows markets, regulators, and civil society to engage with climate-related data and analytics in a transparent, scalable, and actionable way. We're the plumbing, the foundation for a better understanding of climate-linked financial risk." He adds, "Acknowledging the reality of physical climate risk is no longer optional—it's a fiduciary imperative. The scale and complexity of these risks make this project not just important, but essential. No institution can afford to navigate this landscape alone."[31]

[29] Email with Matthew Bain, September 8, 2025.
[30] Interview with Paul Hands, July 3, 2025.
[31] Interview with Steven Tebbe, July 17, 2025.

One-third of respondents also identified regulation and legal compliance as a top area for collaboration **(FIGURE 17)**. While the industry may be recognizing the importance of mutualizing regulatory risk, there's still a long way to go. From Elspeth Minty's perspective, "The work that has been done with the regulatory industry bodies, including the open reg tech projects, is fantastic, but it's still only a small part of what needs to be done."[32]

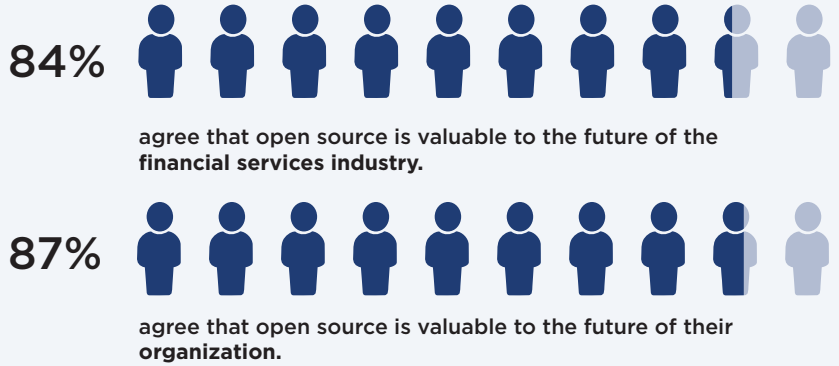
Yet, despite there being plenty of work to accomplish as an industry, there is immediate value to be realized for open source participants. Organizations no longer have to take on certain challenges in isolation, nor must they reinvent the wheel at every turn. As James McLeod of NatWest describes, "Some of the problems that we're trying to solve have already been solved, so we don't have to start from scratch."[33]

Measuring business value and ROI

As shown in **FIGURE 18**, respondents continue to affirm the value of open source for financial services, with 84% agreeing it benefits the industry overall and 87% recognizing value within their own organizations. Larger firms see this even more strongly, with over 95% agreeing it benefits the industry **(APPENDIX B3)** and 96% agreeing it benefits their organization **(APPENDIX B4)**. This widespread acknowledgement reflects the many ways open source delivers value, some of which we've already discussed. These include knowledge sharing, collaboration, collective problem-solving, and the ability to influence technical direction.

FIGURE 18

OSS value to organizations and the financial services industry



2025 FINOS SURVEY, Q14, Q13, SAMPLE SIZE = 209, % OF "AGREE", FULL DATA IN APPENDIX A10-A11

FIGURE 19 shows the breadth of benefits OSS delivers to the respondents' organizations. They see open source improving software quality, delivering business value, lowering costs, speeding up software delivery, and reducing vendor lock-in. As Elspeth Minty acknowledges, "One of the benefits of open source is that you're not necessarily tied into a single vendor"[34]

[32] Interview with Elspeth Minty, July 9, 2025.
[33] Interview with James McLeod, July 29, 2025.
[34] Interview with Elspeth Minty, July 9, 2025.

FIGURE 19

Benefits of OSS use

How often does using OSS deliver the following benefits in your organization? (select one response per row)

1. Improved software quality (63%)
2. Lower cost of software ownership (license costs) (62%)
3. Business value (59%)
4. Improved productivity (58%)
5. Faster development time to market (51%)
6. Less vendor lock-in (50%)
7. Makes the organization a better place to work (50%)
8. Improved collaboration (49%)
9. Improved security (48%)
10. Lower cost of IT operations (48%)
11. Facilitates innovation (46%)

2025 FINOS SURVEY, Q23, SAMPLE SIZE = 202, % OF "OFTEN", FULL DATA IN APPENDIX A12

Talent is another recurring theme in the ROI of open source. Elspeth Minty explains that business value can be derived from open source through the ease of sourcing expert talent. According to Minty, "Open source provides an opportunity for us to hire knowledgeable people with transferable skills. We can more readily source talent by looking at the quality of that individual's open source contributions but also be able to find them from job boards at open source events and then retain them."[35] Mimi Flynn from Morgan Stanley builds on this point: "Leveraging open source makes it so much easier to attract talented engineers who already know the platforms we use. With proprietary software, training takes longer, and onboarding costs are higher."[36] James McLeod shares the value in publicizing an organization's culture to potential employees: "Open source certainly increases the organization's reach within the engineering community, and this enables us to demonstrate not only who we are but what values we uphold when it comes to engineering."[37]

The industry widely recognizes the benefits that open source delivers, but quantifying the dollar value of those savings remains challenging. While 18% of survey respondents reported saving more than $1,000,000 annually from using open source **(FIGURE 20)**, nearly one-third were unsure about their savings, a figure that rises to 45% among larger organizations **(APPENDIX B7)**. Improving visibility into consumption, supported by OSPOs that consolidate insight across teams, can help close this gap, but the true

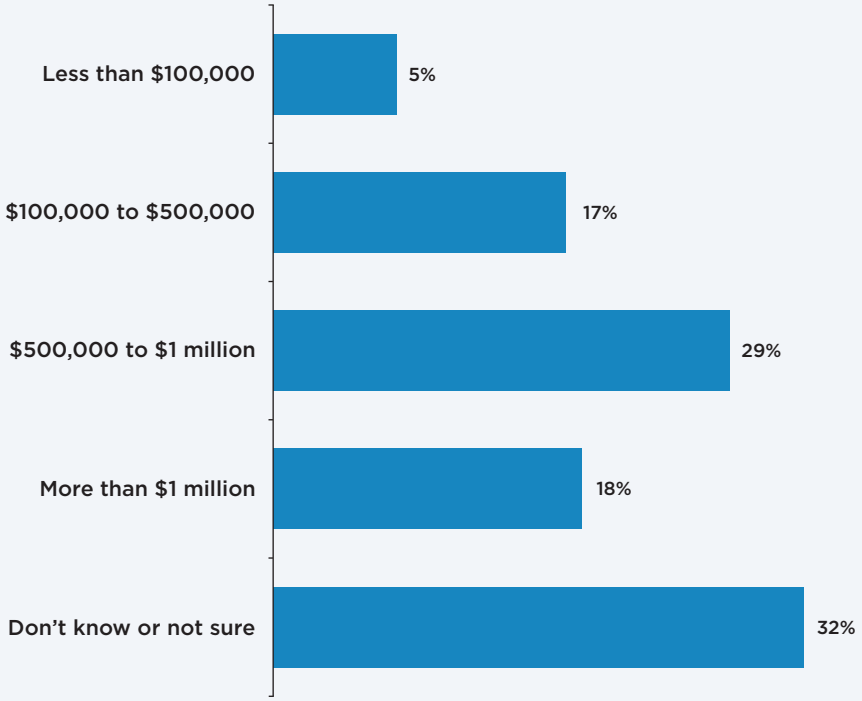
[35] Interview with Elspeth Minty, July 9, 2025.
[36] Interview with Mimi Flynn, July 7, 2025.
[37] Interview with James McLeod, July 29, 2025.

value of open source extends far beyond cost savings. As one technology leader explains, "We're consuming certain capabilities from the open source world that we now want to contribute to because they underpin a lot of the software we run internally. Open source is no longer just a cost-saving mechanism; it's a route to innovation and a strategic asset."[38]

FIGURE 20

Cost savings from using OSS

What is your organization's estimated annual cost savings from using OSS? (select one)



2025 FINOS SURVEY, Q15, SAMPLE SIZE = 209

Still, quantifying the full business value of open source is complex and remains a limiting factor in financial services organizations reaching open source maturity, as we've previously discussed. Efforts continue in this area, such as the study "The Value of Open Source Software,"[39] which estimates the annual demand-side (usage) value of open source globally across all industries at $8.8 trillion. And even this, according to the authors, underestimates the full value.

The growing value of AI

In this section, we find that:

- **Adoption has shifted from caution to commitment.** Financial services firms are moving from initial bans of GenAI to significant investment.
- **Returns remain uneven, but optimism is rising.** While only a minority of prototypes make it to production, nearly 40% of survey respondents either already report ROI or expect to see it within the next year.
- **Open source is becoming a strategic priority.** Momentum is building around open-weight models, with firms seeking flexibility, reduced vendor lock-in, and greater customization.
- **Skills are now the critical barrier.** Firms see capability gaps, not governance, as the biggest challenge to adoption, highlighting the need for new expertise and reskilling strategies to fully unlock the technology's value.

Growing investment

GenAI is a relatively new technology that has rapidly reshaped the technology landscape. Its potential first became apparent with the release of GPT-3 in 2020, but it was the launch of ChatGPT in 2022 that propelled the

[38] Interview with technology leader, June 26, 2025.
[39] https://www.hbs.edu/faculty/Pages/item.aspx?num=65230

technology into mainstream adoption. Initial reactions within financial services were cautious, with many firms even imposing outright bans on its use amid concerns over data security and compliance.[40]

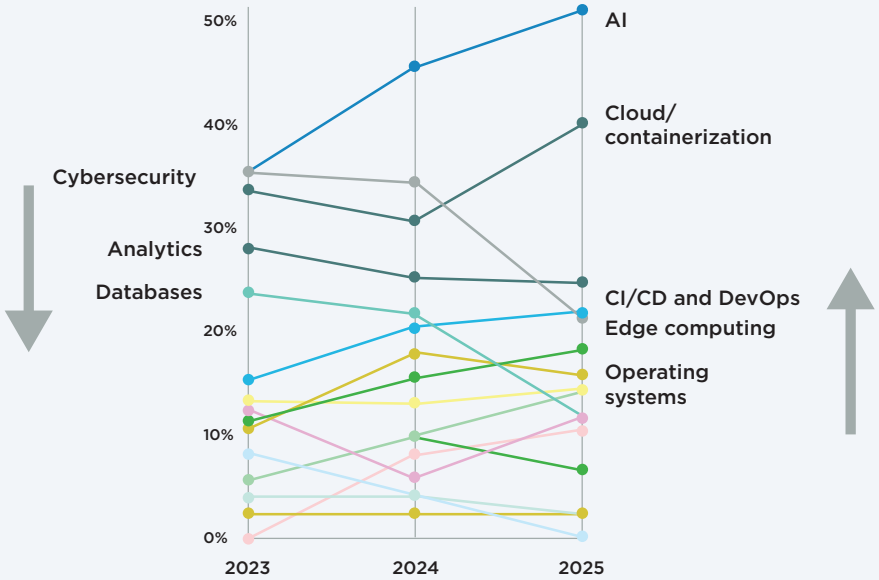
Over the past two years, however, that caution has given way to growing optimism and significant investment. Our survey respondents have consistently identified AI as the most valuable open source technology for the future of their industry over the past three years, with sentiment strengthening each year (see **FIGURE 21**). This rising expectation of value is mirrored in the scale of investment financial services organizations are now making in generative AI.

Examples span both external partnerships and internal innovation. NatWest, for instance, has partnered with OpenAI to enhance its Cora chatbot,[41] while BBVA was highlighted as a collaborator during the global launch of GPT-5.[42] At the same time, leading institutions are building their own solutions: JPMorgan Chase has developed IndexGPT to support investment decision-making;[43] Goldman Sachs is rolling out a custom large language model (LLM)-based assistant across its bankers, traders, and asset managers;[44] and Citi has deployed similar tools to more than 140,000 employees across eight countries.[45] These developments illustrate the rapid shift from risk aversion to large-scale adoption, positioning GenAI as a foundational technology within financial services.

FIGURE 21

Most valuable open source technologies

Which open source technologies do you feel are the most valuable to the future of the financial services industry?



2023-2025 FINOS SURVEYS, Q36, Q14, Q16, SAMPLE SIZE = 324, 249, 209, TOTAL MENTIONS = 861, 683, 571, FULL DATA IN APPENDIX A7

[40] https://www.businessinsider.com/chatgpt-companies-issued-bans-restrictions-openai-ai-amazon-apple-2023-7
[41] https://www.reuters.com/technology/natwest-seals-milestone-uk-banking-collaboration-with-openai-2025-03-20/
[42] https://www.bbva.com/en/innovation/openai-highlights-its-collaboration-with-bbva-in-the-global-launch-of-gpt-5/
[43] https://www.forbes.com/sites/janakirammsv/2024/07/30/jpmorgan-chase-leads-ai-revolution-in-finance-with-launch-of-llm-suite/
[44] https://www.reuters.com/business/goldman-sachs-launches-ai-assistant-firmwide-memo-shows-2025-06-23/
[45] https://www.reuters.com/technology/artificial-intelligence/citigroup-rolls-out-artificial-intelligence-tools-employees-eight-countries-2024-12-04/

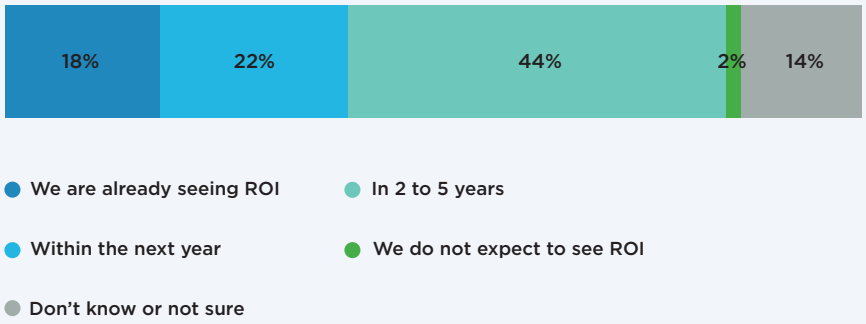
Emerging ROI

While investment in GenAI is accelerating, businesses and independent studies continue to report mixed success in realizing returns. Gartner, for example, has found that only 41% of GenAI prototypes make it into production,[46] highlighting the challenges of scaling from experimentation to reliable products that deliver a return. This has prompted some analysts to describe a growing "GenAI divide"[47] where many organizations demonstrate high levels of adoption but relatively low levels of actual transformation.

FIGURE 22

Expected date to realize ROI from GenAI

When do you expect your organization to realize a ROI from generative AI? (select one)



2025 FINOS SURVEY, Q21, SAMPLE SIZE = 209

Our own survey responses, however, suggest a more optimistic outlook within financial services. **FIGURE 22** shows that 18% of respondents already report achieving a measurable ROI, and a further 22% expect to realize ROI within the next year. This indicates that, while industry-wide challenges persist, financial services firms may be positioning themselves at the forefront of translating GenAI adoption into tangible value.

The increasing role of open source

Open source AI has gained significant momentum over the past year, with a wave of high-profile model releases, advances in AI frameworks, growing industry adoption, and policy initiatives that support open development.

Several landmark releases have underscored this progress. Meta launched LLaMA 3, continuing its investment in the open model ecosystem, while Mistral introduced its 141B parameter model, which it optimized for multilingual natural language processing, mathematics, and coding tasks. In a notable shift, even OpenAI released its first open-weight models in August 2025, an important signal of the broader trend toward open source, or at least open-weight, approaches across the industry.

The appetite for open source is clear. A recent a16z survey[48] found that 46% of business leaders "strongly prefer" open source models, with the leading motivations being greater control, flexibility, and opportunities for customization. Together, these developments highlight the growing role of open source in shaping the future AI landscape and its relevance for financial services firms seeking transparency, adaptability, and long-term resilience.

[46] https://www.gartner.com/en/documents/6587902
[47] https://mlq.ai/media/quarterly_decks/v0.1_State_of_AI_in_Business_2025_Report.pdf
[48] https://a16z.com/generative-ai-enterprise-2024/

"APIs work well for us, but we're conscious of the risks—around cost, long-term viability, and vendor lock-in. We'd like to have open source alternatives ready so we're not entirely dependent on a single provider."[49]

- Paul Hands, *CTO, Parallel 51 and Document Risk Solutions*

Business impact

There has been widespread reporting that GenAI will have its most significant impact, both positive and negative, on knowledge work. Early studies, such as Goldman Sachs's report on the economic impact of GenAI,[50] highlighted computer and mathematical roles among the job categories most at risk from automation.

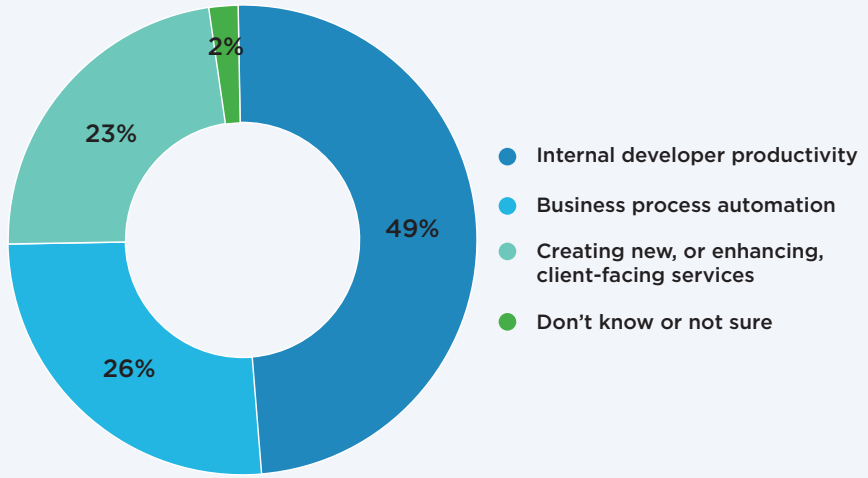
Advances in model capability are already reinforcing this view. On SWE-bench, an evaluation framework that measures model performance against real-world software engineering tasks, pass rates have risen dramatically: from around 20% a year ago to more than 50% for several leading models today. This rapid improvement suggests that the influence of GenAI on software engineering is accelerating.

Our survey respondents echoed this sentiment, with 49% identifying enhanced developer productivity as the area where GenAI will have the greatest impact (see **FIGURE 23**). While the true extent of these productivity gains remains debated, more comprehensive analyses tend to converge on an estimated productivity uplift of around 20%. Together, these findings point to a future in which GenAI becomes a pervasive force in reshaping how software development is carried out.

FIGURE 23

Areas where GenAI will have the biggest impact

In which area do you think GenAI will have the biggest impact? (select one)



2025 FINOS SURVEY, Q19, SAMPLE SIZE = 209

"AI is raising the bar for developer productivity, but it's not removing humans from the loop—especially in financial services. The industry still demands rigor and accountability, and that's not something you can hand over to a machine just yet."[51]

- Ranadip Chatterjee, *Solutions Architect—Global Solutions & Industries (FSI), at a technology company*

[49] Interview with Paul Hands, July 5, 2025.
[50] https://www.gspublishing.com/content/research/en/reports/2023/03/27/d64e052b-0f6e-45d7-967b-d7be35fabd16.html
[51] Interview with Ranadip Chatterjee, July 14, 2025. The views expressed in this document are personal.

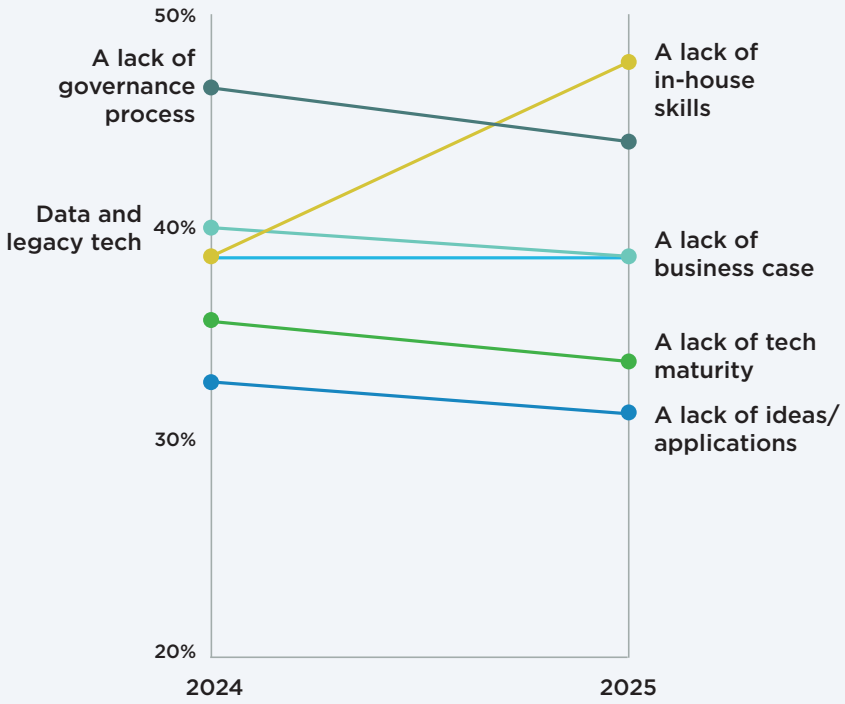
Tackling adoption challenges

As discussed earlier, many organizations are struggling to move GenAI projects into production and generate meaningful ROI. Given the nascent nature of the technology, it would be easy to attribute these challenges purely to issues of technical maturity.

FIGURE 24

Barriers to the use of GenAI

My organization's use of GenAI is limited by, or we do not use GenAI due to: (select one response per row)



2024-2025 FINOS SURVEY, Q16, Q18 SAMPLE SIZE = 249, 209, FULL DATA IN APPENDIX A13

However, our survey highlights a different picture. The most frequently cited barrier is not technology itself but a lack of skills (see **FIGURE 24**). This represents a notable shift from last year's survey, where insufficient governance processes were seen as the main obstacle. Encouragingly, the industry is beginning to address the issue through community-led initiatives, such as the FINOS AI Governance Framework,[52] which provides practical guidance on responsible and compliant adoption.

The challenge of skills is multifaceted. Developing and deploying AI systems requires expertise in emerging areas such as prompt engineering and data engineering, alongside the adoption of new processes capable of handling the inherent non-determinism of GenAI. This skills gap is not unique to financial services. A recent McKinsey report[53] on the state of AI found that while organizations are actively hiring across a wide range of AI-related roles, they are also making significant investments in reskilling their existing workforce. This dual approach underscores the scale of the transformation necessary to fully capture the benefits of GenAI.

[52] https://air-governance-framework.finos.org/
[53] https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai

Conclusions and actionable insights

The 2025 data shows that the industry is operationalizing open source, capturing hard savings, improving software quality, and building the muscle to collaborate at scale. Yet, value realization remains uneven where governance, security operations, and contribution pathways are under-resourced.

Financial services institutions are no longer debating the role of open source; they are now challenged with embedding it strategically across the enterprise, ensuring governance, and aligning contributions with broader business priorities. Organizations should:

- **Invest in cultural and structural enablers.** Secure leadership sponsorship, establish or empower OSPOs, and build internal education programs to normalize contribution and strengthen trust across communities.
- **Strengthen secure consumption.** Adopt and scale consumption practices that comprehensively manage all open source and increase SBOM practices to improve visibility and mitigate supply chain risks.
- **Evolve contribution practices.** Move beyond ad hoc permissions toward consistent frameworks that reduce costly forks, ensure contributions flow back upstream, and pave the way for increased collaboration and value.

Open source community and collaboration are the accelerators of value in financial services. Firms that approach open source as a shared endeavor, balancing business priorities with community stewardship, will be in the best position to capture both near-term efficiency gains and long-term strategic advantages. Organizations should:

- **Deepen community engagement.** Influence, resilience, and innovation come from active participation in upstream projects, not passive consumption. Firms must commit to sustained involvement in the communities that underpin their most critical technologies.
- **Support sustainable ecosystems.** Commercial models, funding commitments, and dedicated individual contributors are all integral to the long-term health of a robust open source ecosystem for financial services.
- **Drive and adopt open standards.** Organizations should prioritize engagement in collaborative standards that reduce duplication, strengthen interoperability, increase operational efficiency, and cut costs across shared domains.
- **Make the community part of the talent strategy.** Organizations should showcase values through contribution and participation, using open source as a magnet for attracting, retaining, and developing engineering talent.

AI is both the fastest moving and most strategically significant open source technology for financial services. Adoption has shifted from hesitation to investment, positioning GenAI as a foundational enabler of productivity, customer experience, and innovation. Yet, challenges remain in scaling prototypes into production-ready systems and finding individuals with the skill sets that can make this happen. Organizations should:

- **Invest in skills at scale.** Pair external hiring with structured reskilling programs in areas such as prompt engineering, data engineering, and secure deployment practices.

- **Prioritize open approaches.** Adopt open-weight models that reduce lock-in, increase transparency, and allow firms to tailor solutions to their needs.
- **Adopt responsible governance frameworks.** Use approaches such as the FINOS AI Governance Framework to balance innovation with compliance and risk management.
- **Measure impact deliberately.** Tie investments in AI to clear productivity, ROI, and resilience outcomes rather than experimentation alone.

Bottom line: Financial services is all-in on open source because it delivers better code, lower costs, stronger compliance, faster delivery, and improved talent pipelines. The firms that will pull ahead now are those that professionalize OSS management, commit to cross-industry standards, and treat AI as an open platform with measurable returns.

Methodology

This research report draws on survey data, industry data, and insights culminating from a series of qualitative interviews. We invited senior IT and business leaders fluent in open source technologies, communities, and challenges to share their insights.

In-depth interviews

We recorded so that transcripts could be produced. Such transcripts were strictly controlled and used only for purposes of this report. If a recording was not permitted, then detailed notes were taken. Questions were also shared for completion via email. Unless quotes were given explicit approval by the named individuals and/or their organizations, sources were anonymized.

About the survey

From May to July of 2025, FINOS and its research partners fielded a worldwide survey of qualified individuals within (or providing services to) the financial services industry on various questions related to organizational open source consumption, contribution, opportunities, and challenges.

The quantitative survey was designed to engage key stakeholders at the intersection of open source and financial institutions, including developers, IT leaders, executive management, security, legal, compliance, and procurement. This was combined with distillation and benchmarking of previous work conducted by the Linux Foundation and FINOS. The survey was distributed and promoted across research partner social media channels, websites, newsletters and via direct email campaigns. The survey sample also included qualified responses from a third-party panel provider.

The data from the 2021, 2022, 2023, and 2024 studies, and this 2025 survey, is **openly available** on data.world. Like last year, this 2025 survey primarily focused on both end-user organizations and fintech vendors. End-user organizations are primarily consumers of IT products and services, whereas fintech vendors are primarily producers of IT products and services. This 2025 survey made comparisons between 2021, 2022, 2023, 2024, and 2025 questions where possible.

Percentage values in charts may not add up to 100% due to rounding.

Screening criteria

The qualified sample size analyzed for the 2025 survey was 209. This sample size reflects those respondents who passed various screening and filtering criteria, including the following:

- A respondent had to be employed full-time, part-time or be self-employed.
- A respondent had to be employed by or working closely with the financial services industry.
- A respondent had to be somewhat familiar, very familiar, or extremely familiar with their organization's approach to open source.
- A respondent had to self-identify as a real person.

The margin of error for this sample size (N = 209) is +/- 5.7% with 90% confidence.

Year-over-year comparisons

Comparisons were made between data collected in 2021, 2022, 2023, 2024, and 2025, question and response design permitting. Respondents had to answer nearly all questions in the survey. However, there were situations when a respondent was unable to answer a question because it was outside the scope of their role or experience. For this reason, a "Don't know or not sure" (DKNS) response was presented to the respondent. The share of DKNS responses in a question influences the percentage values of the remaining responses. Generally, we present the percentage of respondents who answer DKNS as a valid response to each question.

One exception is when we are performing year-over-year comparisons. Differences in the percentage of DKNS responses between questions year-over-year would skew the comparative results. Therefore, when performing year-over-year comparisons, we excluded DKNS responses and recalculated percentages so that we had a normalized basis for comparing the remaining percentage values.

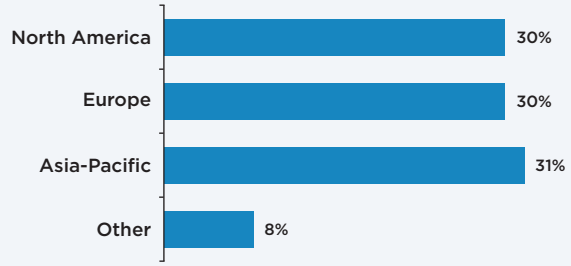
Demographics

FIGURE 25 presents demographic data from the survey. This was a worldwide study, with 30% of respondents residing in North America, 30% in Europe, and 31% in Asia-Pacific. We show the company size data (number of employees) in the second panel and aggregate it into four categories. We included all company sizes in the survey sample, but when we used this variable for segmentation, we decided to exclude organizations with fewer than 250 employees due to data reliability concerns. The third panel classifies the organization of the respondents and shows that 53% of respondents work in financial institutions, and 30% are employed in the fintech / financial services sector.

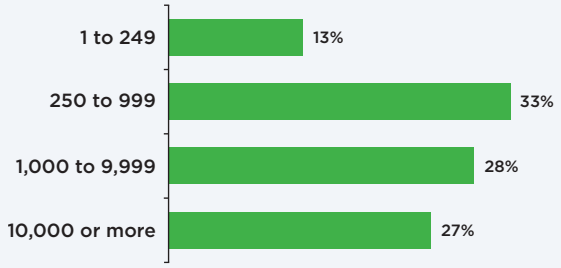
FIGURE 25

Selected demographics from the 2025 FINOS State of Open Source in Financial Services Survey

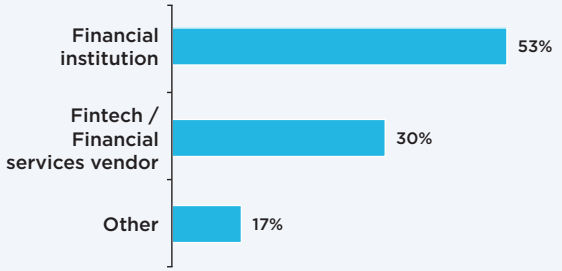
Please select the geographic region in which you reside. (select one)



Please estimate how many employees the organization you work for has worldwide. (select one)



What option best describes the organization you work for? (select one)



2025 FINOS SURVEY, Q6, Q10, Q7, SAMPLE SIZE = 209

Resources

Reports:

- The State of Commercial Open Source 2025
- The Top 10 Banking Trends in 2025 and Beyond
- The 2025 State of OSPOs and OSS Initiatives
- Open Source as Europe's Strategic Advantage 2025
- 2025 Open Source Security and Risk Analysis Report
- 2024 State of Open Source in Financial Services Report
- 2023 State of Open Source in Financial Services Report
- 2022 State of Open Source in Financial Services Report
- 2024 State of the Software Supply Chain
- A Deep Dive into Open Source Program Offices: Structure, Roles, Responsibilities, and Challenges
- A Guide to Open Source Software for Procurement Professionals
- Addressing Cybersecurity Challenges in Open Source Software
- The Case for Confidential Computing
- GitProxy Case Study

Guides & Training:

- Open Source Body of Knowledge
- Open Source Maturity Model in Financial Services
- Using Open Source Code
- Open Source Consumption Manifesto
- Releasing Internal Code into a New Open Source Project
- Marketing Open Source Code
- A Beginner's Guide to Open Source Software Development (Free Training)
- Open Source Program Office 101 (Free Training)
- Automating Supply Chain Security: SBOMs and Signatures (Free Training)
- Developing Secure Software (Free Training)
- Introduction to the Common Domain Model (Free Training)
- Introduction to FDC3 (Free Training)

Open Source Project Catalogs

- FINOS
- Linux Foundation
- Apache Foundation
- Eclipse Foundation

Acknowledgments

This report and the research behind it would not have been possible without the contributions of many individuals. Beginning with the research team partners, the authors wish to thank the entire FINOS and Linux Foundation teams, including Gabriele Columbro, Jane Gavronsky, Aaron Griswold, Win Morgan, Kendall Perez, Anna Hermansen, Mia Chaszeyka along with Philip Holleran at GitHub. Together, this group facilitated various aspects of the research and supported interview outreach.

We would like to thank Adaptive and Symphony for helping to distribute the survey and all our interviewees, whose rich insights feature prominently throughout this report.

Finally, thanks to all who continue to contribute to open source in the financial services industry.

Appendix A

A1: What practices does your organization follow regarding the use of OSS? (select all that apply)	
We have a formal review process for evaluating OSS components	46%
We have internal manuals, checklists, or guidelines for using OSS	42%
We have tooling (e.g., license checkers, security scanning) and automation to implement OSS policies and processes	42%
We require developer training on secure software development	36%
We recommend developer training on secure software development	29%
We engage with outside professionals to determine what OSS components we should use	26%
Our OSPO works with developers to ensure its policies are followed	19%
None of the above	5%
Don't know or not sure	5%
2025 FINOS SURVEY, Q24, SAMPLE SIZE = 202, TOTAL MENTIONS = 504	

A2: Which open source issues are you most concerned about? (select up to three responses)	
Security vulnerabilities in OSS components	52%
Lack of ongoing maintenance or support	48%
Supply chain attacks	37%
Licensing, IP, or compliance risks	36%
Fragmented or immature ecosystems	34%
"Rug pull" (change from permissive to restrictive or non-open license)	33%
Other (please specify)	1%
Don't know or not sure	0%
2025 FINOS SURVEY, Q27, SAMPLE SIZE = 209, TOTAL MENTIONS = 505	

A3: To what extent is the use of OSS permitted in your organization? (select one)— segmented by the following question: What is your level of familiarity with your organization's approach to open source? (select one)	**Somewhat familiar + Familiar**	**Very familiar**
Not permitted	**2%**	**1%**
Permitted under limited circumstances	**28%**	**18%**
Openly encouraged	**37%**	**65%**
Use is up to each development team	**26%**	**15%**
No clear policy	**4%**	**1%**
Don't know or not sure	**4%**	**1%**
2025 FINOS SURVEY, Q22 BY Q3, SAMPLE SIZE = 209		

A4: What practices does your organization follow regarding the use of OSS? (select all that apply)— segmented by the following question: What is your level of familiarity with your organization's approach to open source? (select one)	**Somewhat familiar + Familiar**	**Very familiar**
We have a formal review process for evaluating OSS components	**48%**	**44%**
We have internal manuals, checklists, or guidelines for using OSS	**31%**	**49%**
We have tooling (e.g., license checkers, security scanning) and automation to implement OSS policies and processes	**25%**	**52%**
We require developer training on secure software development	**30%**	**39%**
We recommend developer training on secure software development	**30%**	**28%**
We engage with outside professionals to determine what OSS components we should use	**26%**	**26%**
Our OSPO works with developers to ensure its policies are followed	**9%**	**26%**
None of the above	**1%**	**8%**
Don't know or not sure	**12%**	**2%**
2025 FINOS SURVEY, Q24 BY Q3, SAMPLE SIZE = 202, TOTAL MENTIONS = 504		

A5: What statement is closest to your organization's policy on contributing to open source projects? (select one)— segmented by the following question: What is your level of familiarity with your organization's approach to open source? (select one)	**Somewhat familiar + Familiar**	**Very familiar**
Not permitted	**2%**	**2%**
No clear policy	**17%**	**6%**
Permitted under some conditions	**40%**	**20%**
Up to each development team	**20%**	**28%**
Permitted if required by the open source license	**6%**	**17%**
Openly encouraged	**7%**	**25%**
Don't know or not sure	**7%**	**1%**
2025 FINOS SURVEY, Q29 BY Q3, SAMPLE SIZE = 209		

A6: I feel that my organization's willingness to contribute to open source is limited by: (select one response per row)	**Agree**	**Neutral**	**Disagree**	**Don't know or not sure**
Technology constraints and challenges to upstream OS contributions	**34%**	**37%**	**18%**	**10%**
A fear of leaking IP	**41%**	**29%**	**17%**	**13%**
A lack of policy or training materials	**43%**	**27%**	**20%**	**11%**
Legal or licensing concerns	**48%**	**24%**	**16%**	**11%**
A lack of clear ROI	**48%**	**24%**	**19%**	**8%**
2025 FINOS SURVEY, Q33, SAMPLE SIZE = 202				

A7: Which open source technologies do you feel are the most valuable to the future of the financial services industry? (select up to three responses)	2025	2024	2023
Advanced analytics and data science	23%	24%	27%
Artificial intelligence / Machine learning	49%	45%	35%
Augmented / virtual reality, 3D simulation, graphics	15%	19%	10%
Blockchain	19%	16%	12%
CI/CD & DevOps	21%	20%	15%
Cloud / container technologies (including Kubernetes)	39%	29%	34%
Cybersecurity	20%	32%	35%
Database and data management	12%	21%	23%
DevOps / GitOps / DevSecOps	14%	13%	14%
Edge computing	5%	9%	5%
Industry standards	10%	8%	8%
IoT & Embedded	0%	4%	4%
Networking technologies (5G, SDN, NFV, etc.)	2%	4%	8%
Open data / open models	12%	8%	0%
Open hardware	2%	2%	2%
Operating systems (e.g., Linux)	16%	9%	5%
Storage technologies	2%	4%	4%
Web & application development	11%	6%	13%
2023-2025 FINOS SURVEYS, Q36, Q14, Q16, SAMPLE SIZE = 324, 249, 209, TOTAL MENTIONS = 861, 683, 571			

A8: Which open source technologies do you feel are the most valuable to the future of the financial services industry? (select up to three responses)— segmented by the following question: What is your level of familiarity with your organization's approach to open source? (select one)	**Total**	**Somewhat familiar + Familiar**	**Very familiar**
Artificial intelligence / Machine learning	**49%**	**44%**	**52%**
Cloud / container technologies (including Kubernetes)	**39%**	**24%**	**49%**
Advanced analytics and data science	**23%**	**26%**	**21%**
CI/CD & DevOps	**21%**	**30%**	**15%**
Cybersecurity	**20%**	**20%**	**20%**
Blockchain	**19%**	**26%**	**15%**
Operating systems (e.g., Linux)	**16%**	**13%**	**17%**
Augmented / virtual reality, 3D simulation, graphics	**15%**	**16%**	**15%**
DevOps / GitOps / DevSecOps	**14%**	**11%**	**16%**
Database and data management	**12%**	**11%**	**13%**
Open data / open models	**12%**	**11%**	**13%**
Web & application development	**11%**	**16%**	**7%**
Industry standards	**10%**	**9%**	**10%**
Edge computing	**5%**	**1%**	**8%**
Networking technologies (5G, SDN, NFV, etc.)	**2%**	**4%**	**2%**
Open hardware	**2%**	**1%**	**3%**
Storage technologies	**2%**	**1%**	**2%**
IoT & Embedded	**0%**	**0%**	**1%**

A8: Which open source technologies do you feel are the most valuable to the future of the financial services industry? (select up to three responses)— segmented by the following question: What is your level of familiarity with your organization's approach to open source? (select one)	**Total**	**Somewhat familiar + Familiar**	**Very familiar**
Other (please specify)	**0%**	**0%**	**1%**
Don't know or not sure	**0%**	**0%**	**0%**
2025 FINOS SURVEY, Q16 BY Q3, SAMPLE SIZE = 209, TOTAL MENTIONS = 571			

A9: In which areas can the financial services industry derive the greatest value from open source collaboration? (select up to three responses)	
Industry standards (e.g., trade lifecycle modeling, cloud controls, climate risk measures, digital assets)	**51%**
AI toolchain: tools, datasets, frameworks	**33%**
Regulation and legal compliance	**32%**
LLMs (for finance)	**29%**
Open data / data sharing	**29%**
Precompetitive AI / ML models	**26%**
Core banking (operations) platform	**25%**
Digital identity	**22%**
Other (please specify)	**0%**
Don't know or not sure	**3%**
2025 FINOS SURVEY, Q17, SAMPLE SIZE = 209, TOTAL MENTIONS = 523	

A10: Do you agree or disagree that open source is valuable to the future of the financial services industry? (select one)	
Agree	84%
Neutral	15%
Disagree	0%
Don't know or not sure	1%
2025 FINOS SURVEY, Q14, SAMPLE SIZE = 209	

A11: Do you agree or disagree that open source is valuable to the future of your organization? (select one)	
Agree	87%
Neutral	11%
Disagree	0%
Don't know or not sure	1%
2025 FINOS SURVEY, Q13, SAMPLE SIZE = 209	

A12: How often does using OSS deliver the following benefits in your organization? (select one response per row)	Often	Sometimes	Rarely	Don't know or not sure
Facilitates innovation	46%	38%	5%	10%
Improved security	48%	32%	9%	11%
Lower cost of IT operations	48%	35%	6%	11%
Improved collaboration	49%	36%	6%	8%
Less vendor lock-in	50%	37%	5%	7%
Makes the organization a better place to work	50%	36%	3%	10%
Faster development time to market	51%	37%	3%	8%
Improved productivity	58%	30%	3%	8%
Business value	59%	30%	3%	7%
Lower cost of software ownership (license costs)	62%	25%	6%	7%
Improved software quality	63%	30%	1%	6%
2025 FINOS SURVEY, Q23, SAMPLE SIZE = 202				

A13: My organization's use of generative AI (GenAI) is limited by, or we do not use GenAI due to:	2025	2024
A lack of suitable internal governance processes	43%	45%
The immaturity of this technology	34%	36%
A lack of in-house skills	46%	39%
Data and / or legacy technology	39%	40%
A lack of ideas and applications	32%	33%
A lack of business case and clear ROI	39%	39%
A lack of leadership or ownership	32%	33%
2024-2025 FINOS SURVEY, Q16, Q18 SAMPLE SIZE = 249, 209		

Appendix B

B1: Over the last year, the time your organization has allocated for you to contribute to open source has: (select one)	
Decreased	4%
Stayed the same	37%
Increased	48%
Don't know or not sure	12%
2025 FINOS SURVEY, Q30, SAMPLE SIZE = 197	

B2: Which of the following practices occur in your organization if OSS is modified to meet internal needs? (select all that apply)— segmented by the following question: What option best describes the organization you work for? (select one)	**Financial institution**	**Fintech or other**
Maintained fork – Intentionally created and actively maintained version separate from the upstream project	**46%**	**34%**
Unmaintained fork – Intentionally created but no longer maintained or updated	**25%**	**24%**
Reactive fork – Initially created unintentionally (e.g., due to immediate needs or constraints) but later identified and maintained internally	**30%**	**32%**
Duplicate forks across teams – The same open source project is maintained separately by multiple internal teams	**20%**	**19%**
Shadow fork – Introduced without approval or tracking (e.g., directly copied into a codebase)	**19%**	**19%**
No internal forks – OSS is not modified, or modifications are contributed back to the project	**17%**	**16%**
Don't know or not sure	**11%**	**21%**
2025 FINOS SURVEY, Q28 BY Q7, SAMPLE SIZE = 202, TOTAL MENTIONS = 337		

B3: Do you agree or disagree that open source is valuable to the future of the financial services industry? (select one)— segmented by Please estimate how many employees the organization you work for has worldwide. (select one)	**250 to 999**	**1,000 to 9,999**	**10,000 or more**
Disagree	**0%**	**0%**	**0%**
Neutral	**16%**	**24%**	**5%**
Agree	**82%**	**74%**	**95%**
Don't know or not sure	**1%**	**2%**	**0%**
2025 FINOS SURVEY, Q14 BY Q10, SAMPLE SIZE = 182			

B4: Do you agree or disagree that open source is valuable to the future of your organization? (select one)— segmented by the following: Please estimate how many employees the organization you work for has worldwide. (select one)	**250 to 999**	**1,000 to 9,999**	**10,000 or more**
Disagree	**1%**	**0%**	**0%**
Neutral	**10%**	**14%**	**4%**
Agree	**87%**	**83%**	**96%**
Don't know or not sure	**1%**	**3%**	**0%**
2025 FINOS SURVEY, Q13 BY Q10, SAMPLE SIZE = 182			

B5: Which of the following actions has your organization engaged in regarding OSS? (select all that apply)— filtered for large (>10k employees) financial institutions	
Implemented an OSPO or similar open source initiative	**64%**
Defined a clear and visible open source strategy	**62%**
Defined a public position on open source	**44%**
Joined or associated with open source organizations	**67%**
Funded open source (via foundation membership, sponsorship of individual developers, donations, FOSS Contributor Funds, etc.)	**56%**
None of the above	**15%**
Don't know or not sure	**3%**
2025 FINOS SURVEY, Q11, SAMPLE SIZE = 39, TOTAL MENTIONS = 121	

B6: In which areas do you believe open source will have the greatest impact on AI development and adoption? (select all that apply)	
Standards (e.g. model cards, a definition of open AI)	**56%**
Open source and free-to-use models	**54%**
Frameworks and libraries (e.g. agent toolkits)	**52%**
Test frameworks (e.g. prompt engineering, systems testing)	**45%**
Governance frameworks (e.g. risk catalogues, controls)	**32%**
Other (please specify)	**1%**
Don't know or not sure	**2%**
2025 FINOS SURVEY, Q20, SAMPLE SIZE = 209, TOTAL MENTIONS = 508	

B7: What is your organization's estimated annual cost savings from using OSS? (select one) —filtered for large organizations (>10k employees)	
Less than $100,000	**2%**
$100,000 to $500,000	**4%**
$500,000 to $1 million	**13%**
More than $1 million	**38%**
Don't know or not sure	**45%**
2025 FINOS SURVEY, Q15 BY Q10, SAMPLE SIZE = 56	

FINOS

The Fintech Open Source Foundation (FINOS) is a nonprofit whose mission is to foster the adoption of open source software, standards, and collaborative development practices in financial services. As part of the Linux Foundation, FINOS provides a regulatory-compliant platform for developers from competing organizations to collaborate on innovative projects that transform business operations. With over 100 members spanning major financial institutions, fintechs, and technology consultancies, FINOS is at the forefront of driving open source innovation in finance.

THE LINUX FOUNDATION | Research

Founded in 2021, Linux Foundation Research explores the growing scale of open source collaboration, providing insight into emerging technology trends, best practices, and the global impact of open source projects. Through leveraging project databases and networks, and a commitment to best practices in quantitative and qualitative methodologies, Linux Foundation Research is creating the go-to library for open source insights for the benefit of organizations the world over.

To reference this work, please cite as follows: Hilary Carter, Tosha Ellison, Colin Eberhardt, Brittany Istenes, and Adrienn Lawson, "The 2025 State of Open Source in Financial Services," foreword by Michael Abbott, The Linux Foundation, October 2025.

Scott Logic

At Scott Logic, we love difficult. Our 450 U.K.-based consultants collaborate with some of the world's biggest enterprises, providing a pragmatic approach to software development and delivering measurable value through insightful technology advice. Our mission is to help our clients envision, design, build, and run the software applications that meet their needs and deliver the unique services their customers demand.

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