THE LINUX FOUNDATION | Research

Canonical

The State of Global Open Source 2025

The strategic evolution from a cost-saving tool to mission-critical infrastructure

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World of Open Source

The State of Global Open Source 2025

Open source powers **mission-critical infrastructure** with 40-55% adoption across AI, DevOps, databases, and operating systems.

AI is the technology that **benefits the most from being open source**, according to 38% of respondents.

83% consider open source **valuable to their organization's future**, with 46% reporting increased business value compared to 2024.

Few organizations have clear **governance structures**—only 26% have OSPOs and 34% have defined a clear open source strategy.

71% of organizations expect **less than a 12-hour response time** from support providers for open source software.

53% expect **long-term support guarantees**, and 47% expect rapid security patching for open source software.

54% consider **paid support** essential for mission-critical workloads, followed by 43% for systems handling sensitive data.

Organizations employ **fragmented security approaches** with no single assurance mechanism achieving widespread adoption.

Community health is particularly important, with 44% checking activity levels when evaluating open source components.

72% of organizations say that **engaging in OSS** projects makes their organization **more competitive**.

78% of surveyed professionals believe open source makes their organization a **better workplace**, with 74% citing talent attraction benefits.

Developing **staff knowledge & skills (77%)** and **improving software quality (76%)** are the top organizational **benefits of OSS contribution.**

Contents

Foreword

I've been using open source software for well over a decade now, and it's easy to take for granted the number of high-quality, accessible, and powerful tools that we have at our disposal. It can be hard to remember that for the longest time, there were thousands of businesses and millions of people who had no idea that it existed or that it had the power to completely transform the way their systems and businesses work.

Thankfully, that seems to have changed. We're excited to be collaborating with the team at The Linux Foundation this year on this report, which closely examines the world of open source software to reveal some exciting trends and shifts in the wider landscape. Namely: that open source hasn't just taken root, but is in full bloom as a mission-critical part of business. This year's research has gone beyond measuring open source adoption to look at why it's working, the results enterprises are seeing, and how they're thinking about the future of open source.

And the data reveals what I've thought since I first harnessed the power of open source for my own workstations, or to build an on-premises cloud development and deployment platform that was later used by thousands of engineers. Open source is incredible for productivity, and the research this year confirms that: nearly 86% of respondents indicated that using open source software improves productivity. For most developers, this will not be a surprise. I especially love how easy it is to bootstrap a new project with open source software, and the flexibility in tooling and workflow it offers. This has been a personal mission at Canonical since I joined: we want Ubuntu to be the most powerful, flexible foundation for developers. Recently, we've spearheaded efforts that focus on ensuring that, no matter what toolchain you use, you'll be able to find it in Ubuntu.

It's not just productivity, but the cost of business too. As the report shows, 46% of organizations reported an increase in business value from open source over the last year. This highlights the impact that open source is making, and I expect we'll see this number continue to grow over the next few years. We certainly hear the same from customers. In Brazil for example, one of the country's largest financial institutions has seen remarkable resource efficiency gains from using an open source private cloud, increasing the number of parallel jobs they run in their cloud by more than 400%.

However, saving some time and money isn't such a great selling point if it's not sustainable or safe. More than ever, businesses are demanding more from their OSS in terms of support and security: this research found that more than half of organizations (53%) expect long-term support guarantees, 47% require rapid security patching capabilities, and an eye-opening 71% of organizations expect response times of less than 12 hours from support providers for open source software in production environments. Historically, support has been the hardest thing for OSS to offer, given its business model of passion that relies on grants or donations. But that's changing: we introduced Ubuntu Pro to address exactly these requirements across a wide range of open source packages and toolchains, and our customers, from space computing pioneers to industry-leading games publishers, value the peace of mind it brings them.

For me, these findings indicate that we have a long way to go in making organizations aware of best practices for securing their open source supply chain. Research like this is a step in the right direction though. I hope the resources we're sharing here encourage readers to reflect on the benefits they see from open source software, of which there are many. While it's important for us to celebrate providing a first-class cloud and developer experience, it's equally important to pause and reflect on potential gaps in the security of open source supply chains.

JON SEAGER, VP Engineering, Canonical

Executive summary

As we have done for the last three years, the Linux Foundation engaged the open source community in its World of Open Source Survey. In this 2025 edition, we confirm that organizations depend on open source software as the backbone of their critical systems. However, most lack the governance and security frameworks to manage this dependency safely. While expecting enterprise-level reliability and support, organizations systematically underinvest in the security practices, formal governance structures, community engagement, and comprehensive strategies that production environments demand. This misalignment creates business risks and limits competitive advantages.

Despite open source's widespread adoption in mission-critical infrastructure (with 40-55% penetration across operating systems, cloud platforms, databases, DevOps, and AI) organizational maturity lags behind usage. Only 26% of organizations have implemented Open Source Program Offices (OSPOs) and just 34% have defined clear open source strategies, even though 83% believe open source is valuable to their future and 46% report increased business value from open source over the past year. This governance gap creates substantial risk exposure given the mission-critical nature of these deployments.

The security posture is equally concerning. Most organizations fail to implement basic security evaluation practices, with only 31% using automated security testing tools. No single security assurance framework has achieved broad adoption, creating fragmentation that undermines security across the ecosystem. Organizations demonstrate inconsistent evaluation practices, with community health checks (44%) being more common than security assessments of the technology.

These deficiencies drive organizations toward commercial support solutions that complement traditional open source dynamics. A majority of surveyed organizations demand enterprise-grade support, with 71% expecting sub-12-hour response times, and consider paid support essential for mission-critical workloads (54%), systems handling sensitive data (43%), and regulated environments (38%). This shift reflects open source's evolution from a cost-saving alternative to foundational business infrastructure requiring formal service level agreements and dedicated support personnel.

Organizations seeking to capture full value from open source should consider establishing formal governance structures, implementing comprehensive security evaluation frameworks, and transitioning from passive consumption to active participation. Those with active open source participation are 20% more likely to perceive competitive advantages than passive users, while also gaining benefits in workplace satisfaction (78%) and talent attraction (74%).

Systematic investment can help bridge the maturity gap. Priorities focus on sponsoring critical dependencies (44%), training developers (41%), and increasing upstream contributions (39%). Intellectual property concerns (33%) and licensing complexities (37%) remain barriers requiring dedicated expertise and formal governance structures. AI emerges as the technology domain that benefits most from being open source (38% of respondents), with adoption showing a statistically significant 5% increase from 2024.

These findings suggest that organizations that successfully bridge the governance-adoption gap through active engagement, formal structures, and comprehensive security practices capture competitive advantages in talent acquisition, operational excellence, and market positioning, especially in emerging areas such as AI. Organizations that do not treat open source as a strategic ecosystem requiring dedicated investment and expertise risk falling behind competitors who understand that open source involvement has become integral to technological leadership itself.

Introduction

As part of our ongoing World of Open Source research series, the 2025 edition investigates how open source is adopted across core technology stacks and how organizations employ security evaluation practices, formal governance structures, and support for open source in production environments. The study examines regional variations in open source engagement patterns, the emergence of enterprise-level support expectations that challenge traditional community-driven models, and the competitive advantages gained by organizations that successfully transition from passive consumption to active participation in open source projects.

This research, based on 851 global survey responses (see Methodology for demographics), reveals a misalignment between adoption and governance, providing insights for technology leaders, executives, and policymakers in an era where open source has become critical to business operations and competitive positioning.

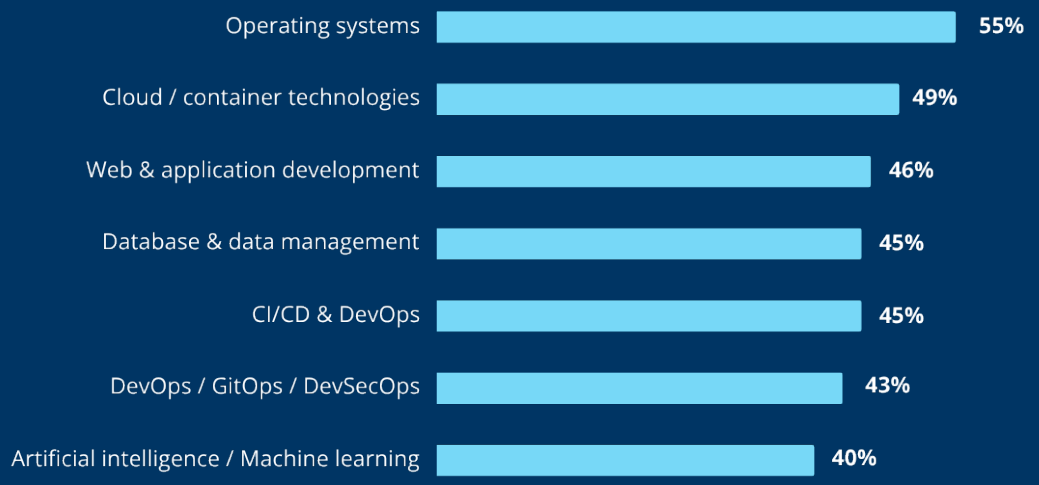
Widespread adoption, inconsistent management

OSS has achieved mission-critical status across enterprise technology stacks

According to our survey respondents, open source has achieved substantial penetration across the core components of enterprise technology stacks (see Figure 1). Operating systems show the highest adoption rate at 55%, reflecting the mature ecosystem around Linux distributions. Cloud and container technologies follow at 49%, with web development, database management, and DevOps clustering between 43% and 46%. These high adoption rates reflect the well-known benefits of using open source solutions for foundational infrastructure layers, including improved productivity, reduced vendor lock-in, and lower cost of ownership, as shown in Figure 2, and documented in previous studies.[1,2,3] Figure 2 also highlights that almost half (46%) of the organizations saw an increase in business value from open source compared to 2024.

FIGURE 1

OPEN SOURCE IS USED ACROSS CORE TECHNOLOGY DOMAINS



AI/ML shows +5% increase compared to 2024

2025 World of Open Source Survey, Q27 "In which of the following areas does your organization use OSS? (select all that apply)", Sample Size = 851, Total mentions = 4,553, showing options with more than 40% responses. The 2024 data comes from the 2024 World of Open Source Survey, Q29, sample size = 1,047. The 5% difference between open source AI/ML adoption in 2024 and 2025 is statistically significant (p = 0.0388).

Open source can be particularly beneficial in emerging technology areas. Open source AI technologies have 40% current adoption, a statistically significant 5% increase from 2024. AI was reported as the technology that benefits the most from being open source (see Figure 3), so we may expect even higher adoption in the future. A previous study from the Linux Foundation shows that open source AI tools provide transparency and cost efficiency.[4] Additionally, open source enables flexible deployment, interoperability, and regulatory assurance.[4] The importance of open source to AI is widely recognized across regions, with North America (40%) and Asia-Pacific (31%) perceiving AI as the technology that benefits the most from being open source, while Europe considers AI (38%) second to operating systems (43%), as observed in Figure 3.

FIGURE 2

NEARLY HALF OF ORGANIZATIONS REPORT INCREASED BUSINESS VALUE FROM OPEN SOURCE ADOPTION

OSS delivers the following benefits to the organizations

46% **of organizations saw increased business value from OSS over the last year**

2025 World of Open Source Survey, Q31 "Over the last year, how has the business value your organization derives from OSS use changed? (select one)", added "increased a little" and "increased a lot", Sample size = 851, Q28 "How often does using OSS deliver the following benefits in your organization? (select one response per row)", Sample Size = 851

FIGURE 3

TECHNOLOGIES THAT BENEFIT MOST FROM OPEN SOURCE

North America

AI/ML	40%
Operating Systems	38%
Cybersecurity	28%

Europe

Operating Systems	43%
AI/ML	38%
Cybersecurity	34%

Asia-Pacific

AI/ML	31%
VR/Graphics	31%
Cloud	29%

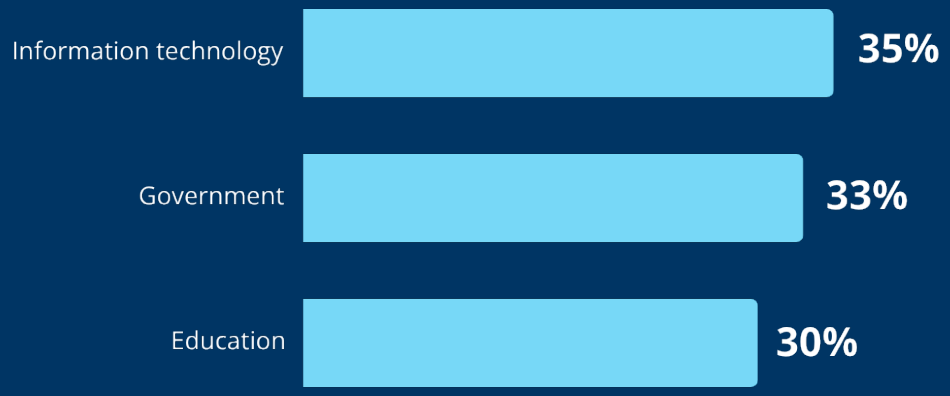
2025 World of Open Source Survey, Q13 "Which technologies do you believe would benefit the most from being open source? (select up to three responses)", Sample Size = 851, Total Mentions = 2,400, showing the top 3, complete data available in Appendix A1, segmented by Q6 "In what country or region does your organization have its headquarters? (select one)", some regions were omitted due to lower response rates

There is a notable gap between current adoption and future potential of open source cybersecurity tools. While only 33% of respondents currently use open source in cybersecurity (see Figure 1), below all other areas, cybersecurity ranks third among the technologies that would most benefit from open source development (see Figure 3 and Appendix A1 for the full list of 18 technologies). Open source cybersecurity tools offer organizations greater transparency into security mechanisms, enabling independent code audits and community-driven threat detection while reducing dependency on proprietary vendor solutions.

In terms of industries, information technology, government, and education are viewed as the sectors that benefit most from open source, as observed in Figure 4. The prominence of government and education is particularly noteworthy, suggesting that open source advantages—such as cost savings, transparency, and reduced vendor dependency—are especially relevant in these contexts. Figure 4 also shows that respondents from the government and education sectors place a high value on open source AI, which ranks higher than other technologies, such as operating systems.

FIGURE 4

INDUSTRIES THAT BENEFIT MOST FROM OPEN SOURCE



2025 World of Open Source Survey, Q14 "Which industries do you think would most benefit from investing in open source? (select up to three responses)", Sample Size = 851, Total Mentions = 2,400, showing only the top 3, complete data available at Appendix A2. Bottom part of the figure represents Q13 "Which technologies do you believe would benefit the most from being open source? (select up to three responses)" segmented by Q10 "Which of the following best describes your organization's primary industry? (select one)", showing only the top 3, complete data available at Appendix A3.

Information Technology

Operating Systems	39%
AI/ML	38%
Cybersecurity	28%

Government

AI/ML	46%
Cybersecurity	44%
Operating Systems	44%

Education

AI/ML	47%
Operating Systems	47%
Cybersecurity	32%

These findings indicate that open source has become a strategic technology choice, embedded in the core of the technology stacks. Open source is not supplementary tooling but an ecosystem of core infrastructure dependencies. However, widespread adoption does not necessarily translate to organizational readiness or optimal and secure implementation practices.

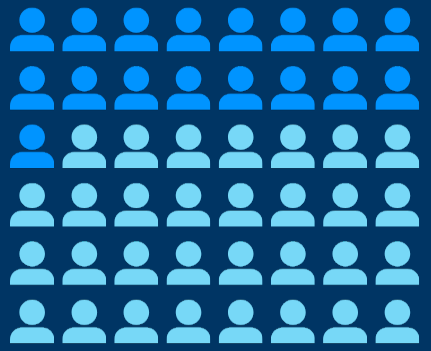
Organizational maturity lags behind adoption rates

Despite its criticality, Figure 5 reveals a gap in organizational maturity for open source governance. While 34% of organizations have defined a clear open source strategy (up 2% from 2024), only 26% have implemented an Open Source Program Office (OSPO), showing just a 1% increase from the previous year. However, this modest growth in traditional OSPOs masks a structural change documented in the 2025 OSPO Report.[7] Organizations are adopting less formalized, less centralized approaches to open source governance due to budget constraints, shifting priorities, and new strategic requirements. Nevertheless, whether centralized or distributed, dedicated open source governance remains critical for managing compliance, security, and contribution workflows.

Open source is not supplementary tooling but an ecosystem of core infrastructure dependencies.

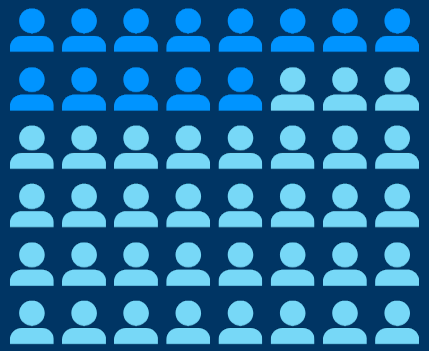
FIGURE 5

OPERATIONAL IMPLEMENTATION GAP PERSISTS IN OPEN SOURCE GOVERNANCE



34%

of organizations defined a clear open source strategy
(+2% in relation to 2024)



26%

of organizations have implemented an OSPO
(+1% in relation to 2024)

2025 World of Open Source Survey, Q12 "Which of the following actions has your organization engaged in regarding OSS? (select all that apply)", Sample Size = 851, Total Mentions = 1,597. 2024 data comes from 2024 World of Open Source Q13, full data available at Appendix A4

This lack of clear structures or strategies for open source creates significant risk exposure and limits organizations' ability to capture the full strategic value of open source participation. Establishing an OSPO helps formalize open source efforts and manage compliance, security, and contribution workflows. These offices provide policies and guidelines, fostering responsible engagement while addressing legal and licensing concerns. OSPOs also play a pivotal role in increasing contributions by empowering employees with resources and support to participate in open source projects.

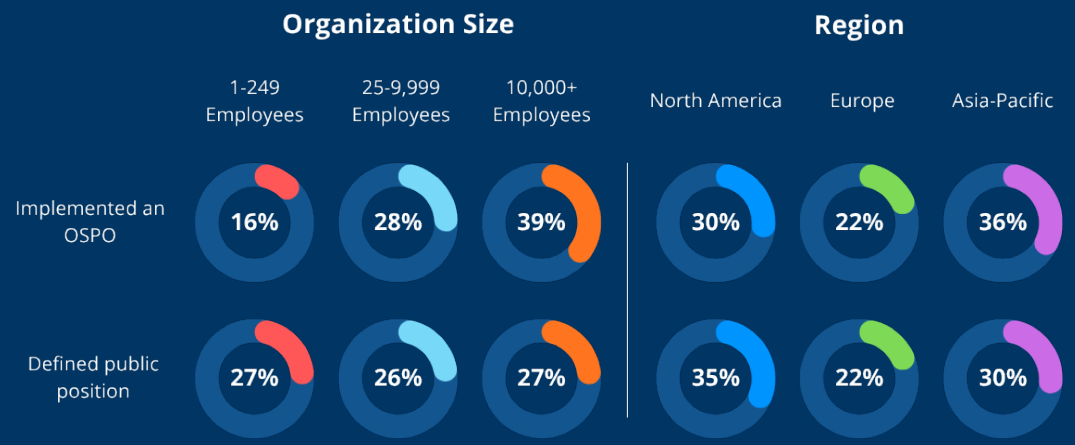
The lack of clear structures or strategies for open source creates significant risk exposure and limits organizations' ability to capture the full strategic value of open source participation.

This governance challenge manifests differently across organizational sizes, though strategic clarity remains universally lacking. As Figure 6 illustrates, large enterprises (10,000+ employees) are 2.4 times more likely to have OSPOs compared to small companies (39% vs. 16%), reflecting their greater resources, complex compliance needs, and ability to dedicate specialized teams to open source governance. However, all organizations, regardless of size, show similar low rates of defined public positions on open source, hovering between 26% and 27%. Having a defined public position provides many benefits: it signals commitment to developers and partners, attracts talent who value open source culture, clarifies contribution policies for employees, and builds trust within the open source community. Without such positions, organizations miss opportunities to differentiate themselves in competitive talent markets.

Regional variations also emerge, with Asia-Pacific leading OSPO implementation at 36%, followed by North America at 30% and

FIGURE 6

ORGANIZATIONAL OPEN SOURCE MATURITY BY ORGANIZATION SIZE AND REGION



2025 World of Open Source Survey, Q12 "Which of the following actions has your organization engaged in regarding OSS? (select all that apply)" by Q11 (organization size) and Q6 (region), Sample Size = 840 for size and 742 for region, full data available at Appendices A5 and A6, some regions were omitted due to lower response rates, only respondents who selected an organization size were considered in this analysis

Europe at 22%. Europe's lower rates across both metrics (22% for OSPOs, 22% for public positions) may reflect different regulatory environments, cultural approaches to open source, or varying stages of digital transformation. For a deeper analysis of the European scenario, we refer the reader to the segmented analysis for this region presented in the report "Open Source as Europe's Strategic Advantage."[6]

Support requirements reflect open source's mission-critical status

Production OSS demands enterprise-level support

Organizations treat open source technologies as business-critical infrastructure, with expectations for support that mirror commercial software standards. Figure 7 demonstrates that 71% of organizations expect response times of less than 12 hours from support providers for open source software in production environments. This expectation signals a fundamental shift from the traditional "community support" model to enterprise-grade service requirements, reflecting open source's role as foundational business systems.

FIGURE 7

TOP EXPECTATIONS FROM A SUPPORT PROVIDER WHEN USING OPEN SOURCE TECHNOLOGIES IN PRODUCTION

2025 World of Open Source Survey, Q34 "What response time do you expect from your support provider for critical issues with OSS in production environments? (select one)", Sample Size = 851, and Q32 "What are your top expectations from a support provider when using open source technologies in production? (select up to three responses)", Sample Size = 851, top 2 shown, full data in Appendix A7

The demand for structured support guarantees reinforces this enterprise positioning. As observed in Figure 7, more than half of organizations (53%) expect long-term support guarantees, while 47% require rapid security patching capabilities. These percentages indicate that organizations view open source not as low-cost alternatives with acceptable compromises, but as core infrastructure requiring strong reliability assurances. The emphasis on security patching particularly reflects the awareness of supply chain vulnerabilities and the need for predictable security maintenance cycles.

Industry variations reveal how sector-specific risk profiles drive support expectations. As shown in Table 1, Financial services organizations demonstrate among the most stringent support requirements, with 96% considering paid OSS support essential and 83% expecting <12-hour issue response. Manufacturing organizations are similarly high at 97% and 76%, respectively. These organizations cannot rely solely on community-driven support models when system failures could trigger compliance violations, financial losses, production line disruptions, or quality control system failures.

This transformation creates both opportunities and challenges for the open source ecosystem, as traditional community-driven maintenance models must evolve to meet enterprise requirements while preserving the collaborative development advantages that made open source valuable in the first place. This shift is creating new market opportunities for commercial support providers, particularly in environments where the cost of system failure far exceeds the price of professional support services.

TABLE 1

HIGH EXPECTATIONS FOR OSS SUPPORT ACROSS INDUSTRIES

Industry	Consider paid support essential	Expect less than 12h response time
Financial Services	96%	83%
Manufacturing	97%	76%
IT	91%	81%
Government	92%	72%
Education	88%	78%

2025 World of Open Source Survey, Q35 by Q10, Q34 by Q10, Sample Size = 591, some industries omitted due to low response rates

Paid support is considered essential across high-stakes use cases

Figure 8 reveals that mission-critical workloads drive the highest demand for paid support at 54%, followed by systems handling sensitive data at 43%, and regulated industry environments at 38%. This hierarchy reflects the escalating consequences of system failure across various operational contexts, ranging from business continuity risks to data breach liabilities and regulatory penalties.

Regional analyses in Figure 9 demonstrate remarkable consistency in support prioritization patterns across regions. Mission-critical workloads consistently rank as the top driver for paid support across North America, Europe, and Asia-Pacific, reinforcing the recognition that operational continuity justifies paid support investment. The second-tier priorities exhibit more regional variation, with North America and the Asia-Pacific regions prioritizing regulated industry environments and sensitive data systems, while Europe places cloud infrastructure among its top three concerns. Europe's focus on cloud infrastructure may reflect the region's complex data sovereignty requirements, where organizations need extra vendor assistance to navigate multi-jurisdictional compliance obligations. Systems handling sensitive data consistently appear among top priorities across all regions, suggesting universal recognition of data breach risks and pressures from customers, partners, and stakeholders regarding data protection.

Organizations require professional support for mission-critical workloads, those handling sensitive data, and regulated industry environments.

FIGURE 8

PRIORITY AREAS FOR PAID SUPPORT

54%	43%	38%
Mission-critical workloads	Systems handling sensitive-data	Regulated industry environments

2025 World of Open Source Survey, Q35 "In which environments would you consider paid support for OSS to be essential? (select all that apply)", Sample Size = 851, Total Mentions = 2,111, top 3 shown, full data available at Appendix A8

FIGURE 9

REGIONAL VARIATIONS IN PERCEPTIONS OF WHERE PAID OSS SUPPORT IS ESSENTIAL

North America		Europe		Asia-Pacific	
Mission-critical workloads	59%	Mission-critical workloads	53%	Mission-critical workloads	44%
Regulated industry environments	43%	Systems handling sensitive data	40%	Systems handling sensitive data	42%
Systems handling sensitive data	40%	Cloud infrastructure	38%	Regulated industry environments	40%

2025 World of Open Source Survey, Q35 by Q6, Sample Size = 591, top 3 for each region shown, full data available at Appendix A9, some regions were omitted due to lower response rate

Commercial support providers must provide guarantees for high-stakes scenarios, moving beyond traditional maintenance contracts to become partners in operational risk management. The community model remains viable for lower-risk deployments; however, organizations require professional support for mission-critical workloads, systems handling sensitive data, and regulated industry environments.

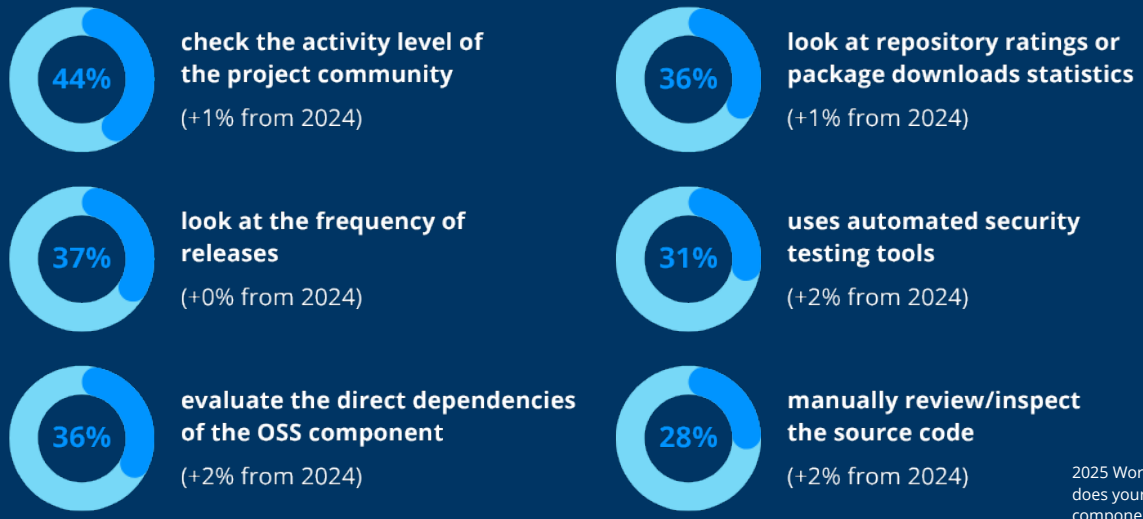
Security practices require further strengthening

Most OSS evaluation practices see limited adoption

Organizations demonstrate concerning gaps in their evaluation practices for open source components, with most security-focused assessments adopted by fewer than half of the surveyed organizations. Figure 10 reveals that checking community activity levels is the most common strategy. This emphasis on community health assessment directly connects to the enterprise support expectations: organizations that fail to evaluate project health may find themselves dependent on components with declining maintainer engagement and a lack of support.

FIGURE 10

EVALUATION PRACTICES BEFORE ADOPTING OSS COMPONENTS



2025 World of Open Source Survey, Q25 "What actions does your organization usually take before using a new OSS component? (select all that apply)", Sample Size = 851, top choices shown, full data available at Appendix A10

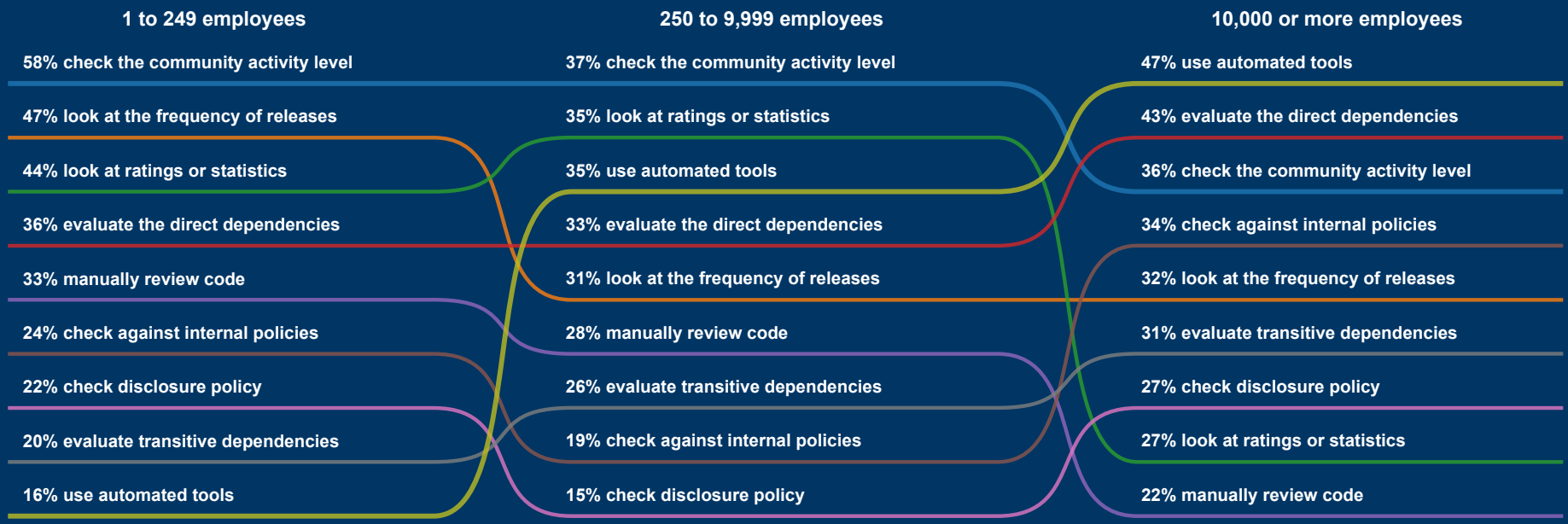
The negligible increases across all evaluation practices from 2024 to 2025—ranging from 0% to 2%—signal organizational inertia that directly undermines security posture. This limited adoption of security evaluation creates cascading risks: organizations deploying unvetted components may face supply chain attacks, discover critical vulnerabilities in production systems, or encounter compliance violations in regulated environments. The failure to evaluate direct dependencies, adopted by only 36% of organizations (Figure 10), compounds these risks by creating blind spots in the supply chain, which have driven recent high-profile security incidents across multiple industries.

As observed in Figure 11, smaller organizations (1-249 employees) are particularly interested in community health, with 58% checking community activity levels, 47% looking at the frequency of releases, and 44% examining ratings or statistics as their top three evaluation practices. However, these community health-focused approaches drop significantly in ranking among larger organizations (10,000+ employees), where checking community activity levels falls from 1st to 6th place, frequency of releases drops from 2nd to 5th place, and ratings or statistics plummet from 3rd to 9th place. Instead, larger enterprises prioritize automated tools (47%), direct dependency evaluation (43%), and internal policy compliance (34%) as their top three practices.

Small companies use automated security testing tools far less often than large companies (roughly 16% adoption for small firms vs. 47% for large firms). These findings indicate that smaller organizations rely on community health indicators that require minimal infrastructure investment, while larger enterprises prioritize systematic security assessment methods that demand dedicated tooling and specialized expertise. The disparity suggests that smaller organizations over-rely on community-driven support, while larger enterprises may consider community response timelines incompatible with their operational requirements and customer commitments.

FIGURE 11

SECURITY PRACTICES BY ORGANIZATION SIZE



2025 World of Open Source Survey, Q25 by Q11, Sample Size = 840, only respondents who selected an organization size were considered

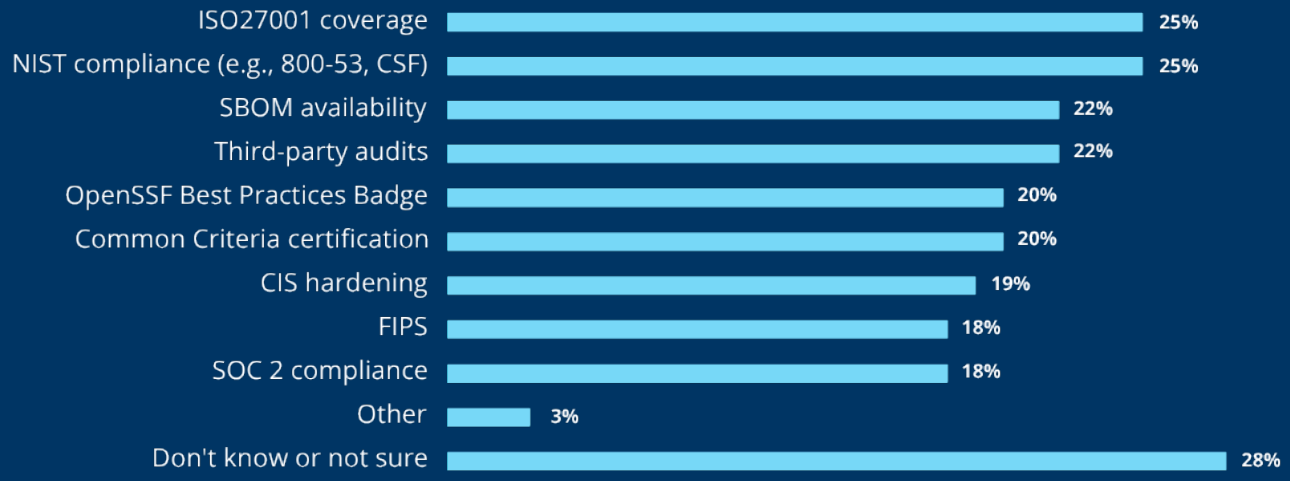
The gap between widespread open source adoption and limited evaluation practices creates a fundamental mismatch between organizational risk exposure and risk management capabilities. While organizations have embraced open source as core infrastructure, they have not correspondingly invested in the assessment frameworks necessary to ensure secure and sustainable implementation. This gap becomes particularly problematic given the mission-critical nature of many open source deployments, where inadequate evaluation can lead to downstream security incidents, compliance violations, or unexpected maintenance burdens that compromise system reliability.

Fragmentation in security evaluation criteria

Organizations understand that security assurances matter, but no single security assurance drives OSS trust. Figure 12 reveals a lack of consensus for open source trust, with no certification or assurance mechanism achieving adoption by more than a quarter of the organizations and with slight variation among the options (18%-25%). ISO27001 coverage and NIST compliance (such as 800-53, CSF) tie at the top with 25% each, followed closely by SBOM availability and third-party audits at 22%. Notably, 28% of respondents indicated "Don't know or not sure," the highest response rate, further evidencing the uncertainty and lack of standardization in OSS security assurance practices.

FIGURE 12

NO CLEAR CONSENSUS ON SECURITY ASSURANCES FOR OSS TRUST



2025 World of Open Source Survey, Q26 "Which certifications or security assurances would make you more likely to adopt or trust an OSS solution? (select all that apply)", Sample Size = 851, Total Mentions = 1,865

Regional variations compound this fragmentation challenge, as shown in Figure 13. North America favors NIST compliance, SBOM availability and third-party audits at 28%, 24% and 23% respectively. Europe exhibits an opposite pattern with NIST compliance as the fourth most preferred certificate, whereas ISO coverage leads as the top at 29%. The Asia-Pacific region presents a third different profile, with Common Criteria certification leading at 45%—more than doubling the preference shown in other regions—followed by the OpenSSF Best Practices Badge at 30%.

The absence of a dominant security standard creates operational challenges for both open source projects and consuming organizations. Projects need to pursue multiple, potentially conflicting, certification pathways to satisfy diverse organizational requirements, while enterprises must develop internal expertise across numerous security frameworks rather than focusing on a single, widely accepted standard. The implications extend to fundamental questions about open source security maturity. Without convergence toward common security evaluation criteria, the ecosystem risks perpetuating the security assessment gaps identified in previous sections, where organizations continue to rely on inconsistent evaluation practices rather than standardized security validation processes.

The security evaluation challenges identified in this study align closely with findings from our EU Cyber Resilience Act (CRA) readiness research, which showed that 46% of manufacturers passively rely on upstream OSS projects for security fixes. [7] The CRA readiness research shows that those implementing automated tools, conducting security assessments, and maintaining SBOMs are better positioned for regulatory compliance. The regulatory pressure from the CRA, which takes full effect in December 2027, provides additional urgency for addressing the security evaluation gaps identified here and move beyond the current fragmented approach to security evaluation and adopt more comprehensive, standardized frameworks for assessing and managing open source security risks.

FIGURE 13

NO GLOBAL ALIGNMENT ON OSS SECURITY CERTIFICATIONS

2025 World of Open Source Survey, Q26 by Q6, Sample Size = 851, some regions were omitted due to lower response rates

The CRA regulation presents an opportunity to improve how organizations engage with open source software, as the regulation requires manufacturers to take active responsibility for the security of their open source dependencies, meaning they can no longer remain passive consumers of community-developed software. The CRA awareness and readiness study shows that organizations actively engaging with OSS projects are twice as likely to assess security practices compared to passive users, demonstrating that engagement drives better security outcomes. The regulation encourages manufacturers to contribute security fixes upstream and provide financial support to open source projects. This creates a legal pathway for organizations to invest in the sustainability and security of their critical dependencies.

Organizations view open source participation as a strategic investment that accelerates their market positioning.

Business value of active open source engagement

Engaging in open source software drives organizational excellence across multiple dimensions

Organizations perceive engagement in open source as a strategic business asset. Figure 14 reveals that 83% believe open source is valuable to their organization's future. The perception of competitive advantage proves particularly significant, with 72% of organizations believing that engaging in open source projects makes them more competitive. This finding suggests that organizations view open source participation as a strategic investment that accelerates their competitive market positioning.

Awareness levels vary within organizations (Figure 14). In particular, fewer C-level executives (70%) recognize the value of open source to their organization's future compared to non-C-level employees (86%). This delta suggests that the strategic value of OSS at the C-suite level could be improved.

FIGURE 14

ORGANIZATIONS VIEW ENGAGING IN OSS AS A LEVER FOR QUALITY AND COMPETITIVENESS

2025 World of Open Source Survey, Q19 "To what extent do you agree or disagree that OSS is valuable to the future of your organization? (select one)", Q18 "To what extent do you agree or disagree that engaging in open source projects makes your organization more competitive? (select one)", Sample Size = 851, percentages represent the number of respondents who agreed with the statements.

As observed in Figure 15, organizations with very active open source engagement show 79% agreement that open source makes them more competitive, compared to 66% for passive organizations. This 13 percentage point gap means that active organizations are approximately 20% more likely to recognize competitive advantages than passive ones, suggesting that competitive advantage scales with the intensity of engagement. Active organizations benefit from direct influence over project roadmaps, early access to emerging capabilities, and deep integration with innovation networks that drive industry standards. Moreover, Figure 16 shows that organizations that engage in open source contributions report benefits such as improving knowledge and skills of staff (77%), software quality (76%), and innovation (72%). These benefits directly translate to competitive advantage through reduced maintenance costs, faster feature delivery cycles, and more reliable products that strengthen customer relationships and market positioning.

Active organizations are 20% more likely to recognize competitive advantages than passive ones, suggesting that competitive advantage scales with the intensity of engagement.

These findings indicate that open source engagement represents a strategic choice with implications for competitive positioning. Organizations that embrace active engagement position themselves to shape rather than adapt to industry technological evolution.

FIGURE 15

GREATER OSS ENGAGEMENT IS LINKED TO HIGHER COMPETITIVENESS

2025 World of Open Source Survey, Q18 by Q36, Sample Size = 851

FIGURE 16

CONTRIBUTING TO OSS DELIVERS A VARIETY OF BENEFITS TO ORGANIZATIONS

2025 World of Open Source Survey, Q37 "How often do OSS contributions in your organization deliver the following benefits: (select one response per row)", aggregating often and sometimes, sample size = 675, question only answered by organizations with some level of engagement with OSS projects (Q36 different than "Passive").

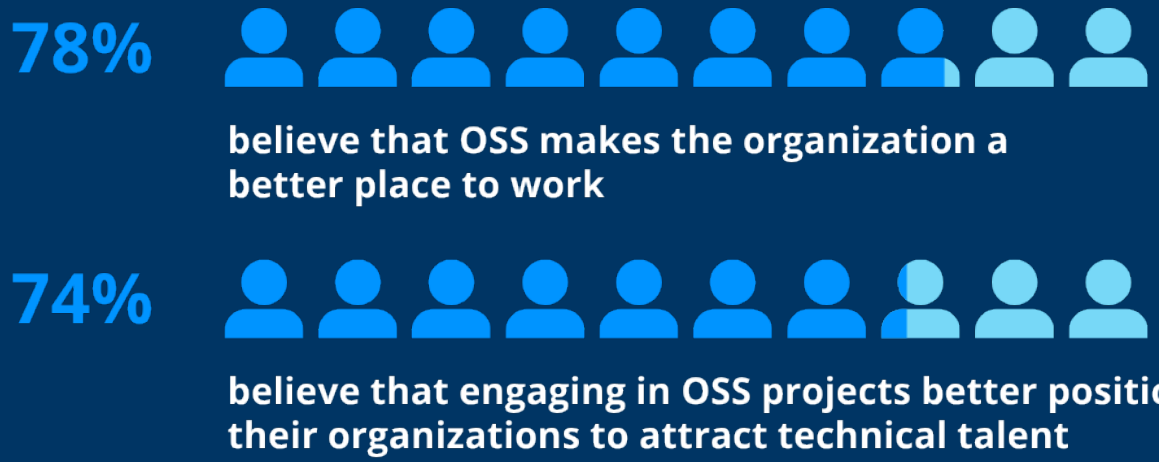
Engaging in open source software helps attract and retain technical talent

Open source engagement has another key advantage: it creates compelling workplace environments that technical professionals seek. Figure 17 demonstrates that 78% of surveyed professionals say that open source makes their organization a better place to work. Engagement with open source projects may come from the intellectual stimulation of contributing to meaningful projects, the professional development opportunities inherent in open source collaboration, and the sense of purpose that comes from participating in technology advancement that extends beyond organizational boundaries.[8]

According to 74% of respondents, engaging in open source projects also helps to attract technical talent (Figure 17). This finding is corroborated by recent studies, such as the 2025 State of Tech Talent Report, which showed that 68% of organizations are offering an open source culture to retain talent and 84% evaluate this strategy as effective.[9] Organizations that actively participate in open source projects demonstrate their technical capabilities publicly, showcase the quality of their development practices, and signal their investment in cutting-edge technologies that talented developers want to work with.

FIGURE 17

OSS IMPROVES WORKPLACE SATISFACTION AND RECRUITMENT POTENTIAL



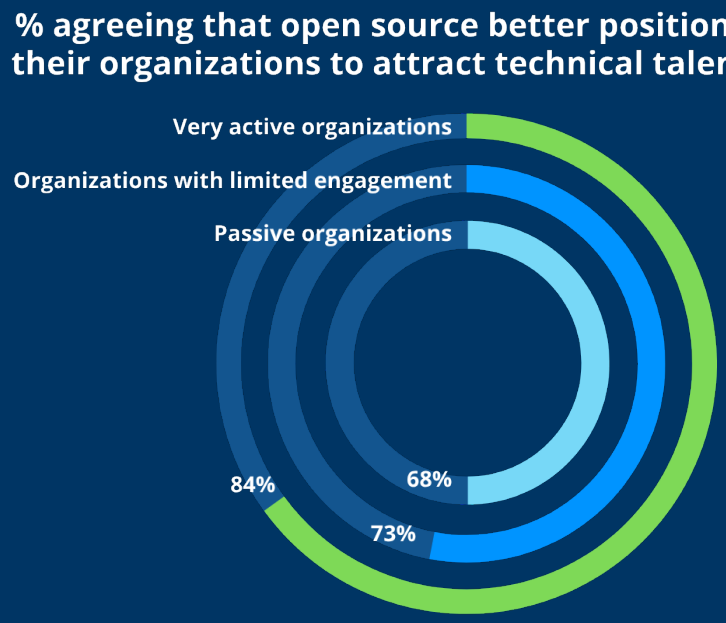
2025 World of Open Source Survey, Q28 "How often does using OSS deliver the following benefits in your organization? (Makes the organization a better place to work)", respondents who answered sometimes and often, Q17" To what extent do you agree or disagree that engaging in open source projects better positions your organization to attract technical talent? (select one)", respondents who answered Agree, Sample Size = 851

Indeed, as observed in Figure 18, very active organizations show stronger agreement that open source better positions them for talent attraction, compared to passive organizations. Very active organizations may offer developers the opportunity to work on projects with industry-wide impact, contribute to technologies they may have previously used or admired, and build professional reputations within open source communities that extend far beyond their current employer. These organizations also tend to attract talent who bring external open source experience and connections, creating virtuous cycles where strong open source engagement attracts contributors who further strengthen the organization's open source capabilities.

These findings suggest that open source engagement is a significant component of technical talent strategy, particularly as the competition for skilled developers intensifies across various industries. Organizations that embrace active open source participation position themselves to access a broader spectrum of technical talent and can leverage community engagement as a differentiating factor in competitive hiring markets.

FIGURE 18

GREATER OSS ENGAGEMENT IS LINKED TO STRONGER TALENT ATTRACTION



2025 World of Open Source Survey, Q17 by Q36, Sample Size = 851

Organizational investment priorities and barriers

Investment priorities signal aspiration for more active participation

When asked about investment priorities, organizations reveal a willingness to engage in deeper, more proactive OSS participation. Activities such as sponsoring critical OSS dependencies (44%), training developers for OSS usage and contribution (41%), and contributing or collaborating upstream (39%) rank higher than internal operational goals, such as compliance or licensing (23%), as observed in Figure 19. These strategies rank among the top three priorities for organizations of every size category (Table 2). Notably, for large organizations, this is the #1 priority (45% of respondents from large firms selected it). These leading priorities indicate that organizations recognize the business value of engaging in open source development, as discussed in the previous section.

FIGURE 19

INVESTMENT PRIORITIZATION IN OSS

2025 World of Open Source Survey, Q22 "If your organization were to invest more in OSS over the next year, what would you prioritize funding or resourcing? (select up to three responses)", sample size = 851

TABLE 2

INVESTMENT PRIORITIES PER COMPANY SIZE

1 to 249 employees	250 to 9,999 employees	10,000 or more employees
Sponsoring projects (46%)	Training (44%)	Increasing contributions (45%)
Increasing contributions (38%)	Sponsoring projects (43%)	Sponsoring projects (44%)
Training (35%)	Increasing contributions (36%)	Training (44%)

2025 World of Open Source Survey, Q22 vs Q11, top 3 per company size, full data available at Appendix A11, sample size = 840, only respondents who selected an organization size were considered

Barriers to a more active OSS participation

Intellectual property concerns dominate organizational barriers to open source engagement, creating tension between participation aspirations and risk management requirements. Figure 20 reveals that fear of leaking intellectual property (33%) and other legal/licensing issues (33%) are the top barriers to OSS contributions. Similarly, licensing- and IP-related worries dominate the barriers to OSS adoption, cited by 37% of organizations. These IP-related concerns reflect organizations' deliberate assessment of how to participate in open source communities while protecting against legal vulnerabilities or compromising competitive positioning.

Notably, 36% cite limited technical support as a barrier to using open source, directly connecting this finding to the earlier point about support expectations, where organizations require sub-12-hour response times and long-term support guarantees that traditional community models cannot consistently provide. This support gap creates a strategic tension where organizations must balance their desire for expanded open source adoption against the reality of available support infrastructure.

Uncertain return on investment emerges as a contribution barrier, indicating that organizations struggle to quantify the business value of open source participation despite recognizing its strategic importance. This measurement challenge may reflect the indirect nature of many open source benefits, such as talent attraction and technical reputation, which resist traditional ROI calculations but provide substantial long-term value.

The clustering of barriers in the 29-37% range suggests that no single issue dominates organizational reluctance to expand open source engagement. Organizations should address IP governance, legal compliance, technical support arrangements, and security evaluation processes to enable more active open source engagement, indicating that successful participation requires comprehensive organizational capabilities rather than solutions to isolated problems.

FIGURE 20

BARRIERS THAT LIMIT OSS CONTRIBUTION AND ADOPTION IN ORGANIZATIONS

	Contribution	Use
#1	Fear of leaking IP (33%)	Licensing IP concerns (37%)
#2	Legal or licensing concerns (33%)	Lack of technical support (36%)
#3	Uncertain ROI (29%)	Security concerns (33%)

2025 World of Open Source Survey, Q44 "Which of the following factors limit OSS contributions in your organization? (select all that apply)", top 3 shown, full data available at Appendix A12, Q29 "Which of the following factors limit OSS use in your organization? (select all that apply)", top 3 shown, full data available at Appendix A13, sample size = 841

Conclusion

The 2025 World of Open Source Survey reveals a paradox: while open source software has achieved mission-critical status with widespread adoption across enterprise technology stacks, organizational maturity significantly lags behind this adoption. Only 34% of organizations have defined clear open source strategies, and just 26% have implemented Open Source Program Offices. Organizations often require enterprise-grade support (71% expect <12-hour response times). They also broadly recognize the strategic value of open source – 83% believe it's valuable to their future, and 72% view active OSS engagement as a source of competitive advantage. However, fragmented security evaluation practices, uncertain ROI measurement frameworks, and IP concerns limit deeper participation in the ecosystem. This disconnect creates significant business risks: organizations depend on foundational technologies they cannot adequately assess, understand, or strategically influence.

Key recommendations include the following:

Establish open source governance structures.

Organizations should implement Open Source Program Offices (OSPOs) or formalize open source strategies to manage compliance, security, and contribution workflows. Such strategies include defining clear public positions on open source engagement to signal commitment to developers and partners, which can differentiate organizations in competitive talent markets. Additionally, developing comprehensive IP governance frameworks and standardized legal compliance processes is essential to address the intellectual property concerns cited by 33% of organizations as barriers to deeper participation.

Strengthen security evaluation practices.

Organizations should move beyond the community health checks currently used by 44% of organizations to implement systematic security assessment frameworks. This includes deploying automated security testing tools for open source component evaluation, which is particularly critical given that only 16% of small companies adopt this practice. The current fragmentation where no single security assurance mechanism achieves widespread adoption must be addressed through standardized security evaluation criteria, comprehensive Software Bill of Materials (SBOM) practices, and robust direct dependency evaluation processes.

Establish enterprise-grade support arrangements.

Organizations should establish support arrangements with sub-12-hour response times for mission-critical workloads, as expected by 71% of surveyed organizations. This includes negotiating long-term support guarantees and rapid security patching capabilities with commercial providers to meet the expectations of 53% and 47% of organizations respectively. Companies must define clear criteria for when paid support is essential, like mission-critical workloads (cited by 54%), sensitive data environments (cited by 43%), and regulated industry contexts (cited by 38%). Developing decision frameworks that consider the operational consequences of system failure can help organizations balance cost considerations with business continuity requirements when selecting support providers.

Promote strategic participation through active engagement.

Organizations prioritize sponsoring critical open source dependencies, which ranks as the top investment priority for 44% of respondents, to ensure project sustainability and gain strategic influence over technology roadmaps. Funding comprehensive developer training programs to engage in open source, cited as a priority by 41% of organizations, enables both effective usage and upstream contributions. Increasing upstream collaboration and code contributions, prioritized by 39% of organizations, facilitates the transition from passive consumption to active participation, which delivers the 20% competitive advantage gained by actively engaged organizations compared to passive users.

Methodology

The 2025 World of Open Source: Global Spotlight Survey included 45 questions on the topics of open source use, contribution, value, and sustainability. The survey was in the field in May 2025. For information about access to the survey instrument, see the Data. World access heading below.

Survey screening involved a set of questions to validate the respondent.

- The respondent had to be at least somewhat familiar with the concept of OSS.
- The respondent needed to self-identify as a real person willing to share their OSS experience and perceptions.
- The respondent needed to be able to identify their employment status and represent an organization.

A total of 1,790 candidates started the survey, but 939 did not finish or were disqualified due to our screening criteria. Ultimately, 851 participants reached the end of the survey and qualified to be included in the study. The margin of error for this sample size was ± 2.8% at a 90% confidence level. The research team stratified data collection by region, company size, and organization type.

Although respondents had to answer nearly all questions in the survey, there were times when the respondents were unable to answer a question because it was outside the scope of their role or experience. For this reason, we added a "Don't know or not sure" (DKNS) response to the list of responses for nearly all questions. However, this creates a variety of analytical challenges. One approach was to treat a DKNS just like any other response, so that the percentage of respondents who answered the DKNS is known. The advantage of this approach is that it reports the exact distribution of data collected. The challenge with this approach is that it can distort the distribution of valid responses, i.e., responses where respondents could answer the question. Some of the analyses in this report exclude DKNS responses. Excluding DKNS data from a question does not change the distribution of data (counts) for the other responses, but it does change the size of the denominator used to calculate the percentage of responses across the remaining responses. This has the effect of proportionally increasing the percentage values of the remaining responses. Where we have elected to exclude DKNS data, we add the information in the footnote for the figure.

The percentage values in this report may not total exactly 100% due to rounding or for being related to "select all that apply" questions.

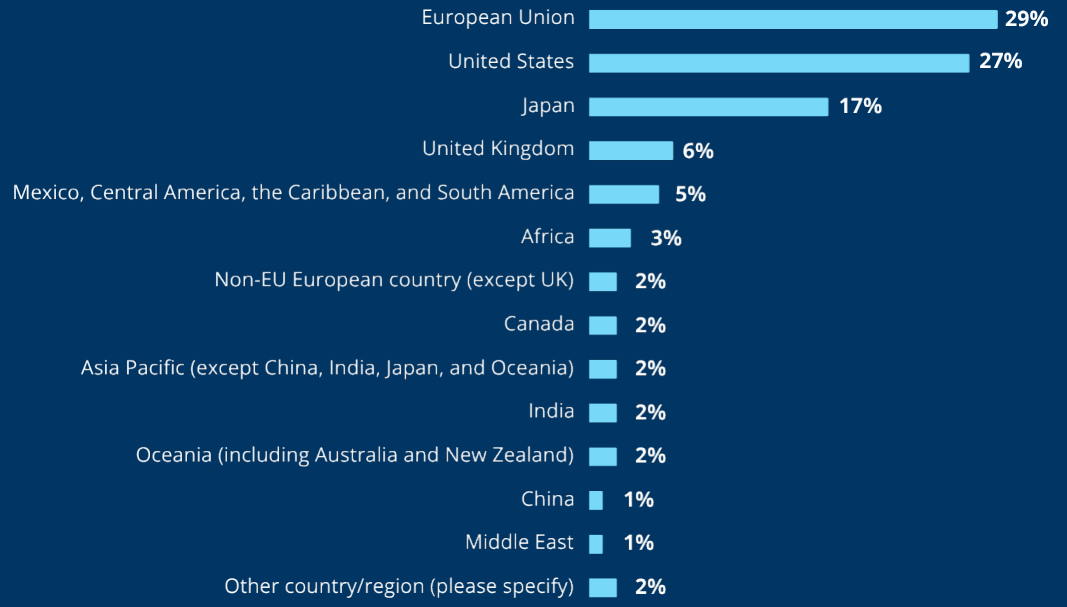
Survey demographics

The demographic data in Figure 21 illustrates the geographic distribution of the survey in the top panel. Respondents were asked to identify the region where their corporate headquarters was located. We aggregated the participants into North America (the United States and Canada), Europe (European Union, UK, and Non-EU European Countries), and Asia-Pacific (China, India, Japan, and other Asia-Pacific countries), with 29%, 37%, and 21% of the sample, respectively. We omitted other regions in this report due to low representation. We aimed to gather responses from all parts of the world, but given the Linux Foundation's primary presence in North America and Europe, we received the majority of responses from those regions. We focused efforts on gathering a sufficient sample from Japan to create a Japan Spotlight report from the survey results. Therefore, Japan (17%) is over-represented in the Asia-Pacific sample (21%).

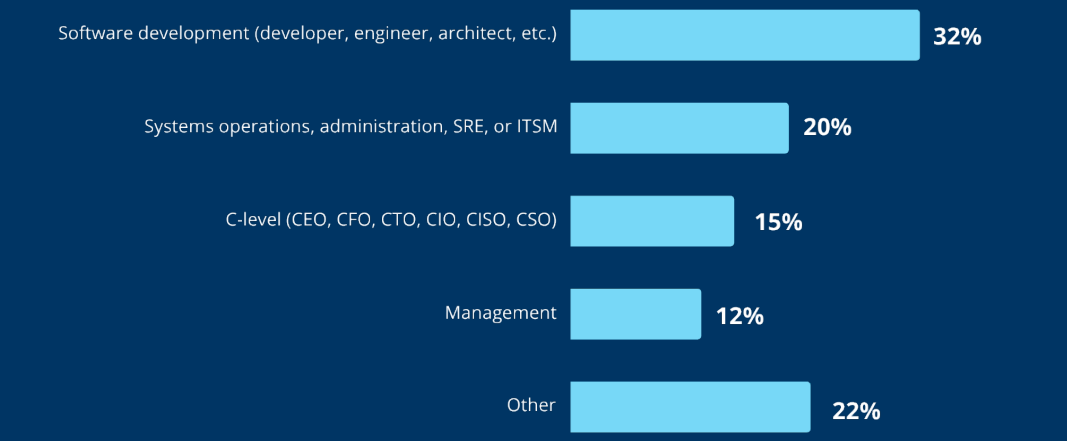
FIGURE 21

RESPONDENT DEMOGRAPHICS

In what country or region does your organization have its headquarters?



Professionally, which role do you most closely identify with?



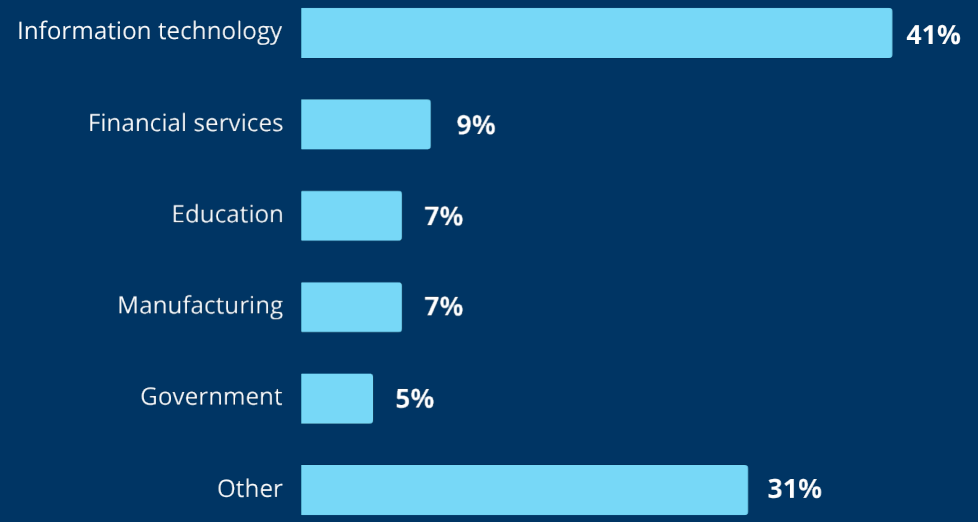
2025 World of Open Source Survey, Q6, Q5, Sample Size = 851

The bottom chart in Figure 21 shows the professional role of respondents, the organization industry, and company size as measured by the number of employees. Most respondents were in IT roles, and 41% worked in the IT industry, which included system integrators, IT consulting firms, hardware and software vendors, cloud service providers, etc. Figure 22 shows the surveyed organizations' industries and their company size. It shows that the size of the organizations surveyed ranges from microbusinesses with 1 to 10 employees to large organizations with more than 20,000 employees. We regrouped these respondents into three categories: 1 to 249 (35%), 250 to 9,999 (42%), and 10,000 or more (23%).

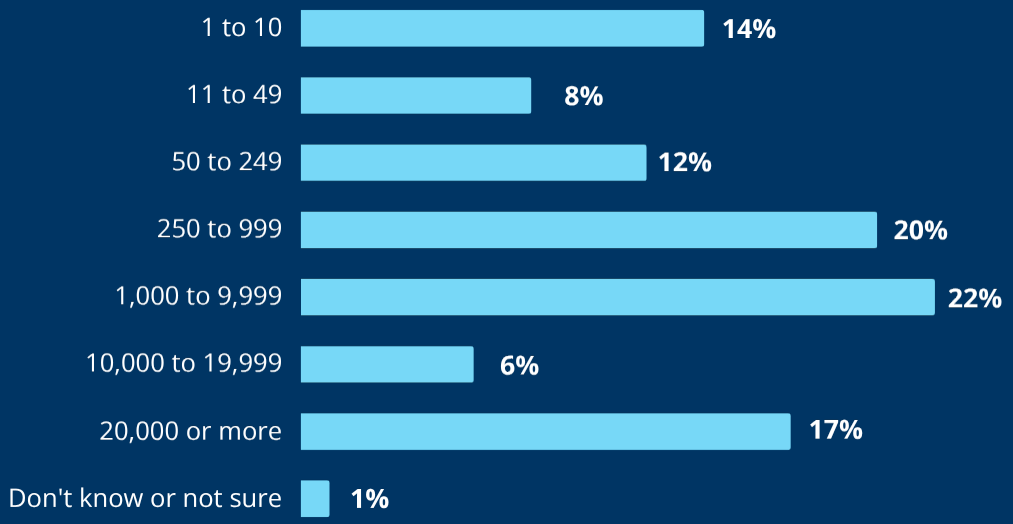
FIGURE 22

RESPONDENT DEMOGRAPHICS

Which of the following best describes your organization's primary industry?



Please estimate how many employees your organization has worldwide



2025 World of Open Source Survey, Q10, Q11, some demographics were regrouped, sample size = 841

As observed in Figure 23, organizations have a wide range of engagement levels with open source projects. About one in five organizations (19%) are highly active, regularly contributing code to key projects, while 24% engage at a moderate level by submitting code, reporting bugs, or improving documentation. Limited participation, such as reporting issues or joining discussions, accounts for 20%, and 21% of organizations take a passive stance—using OSS without contributing back.

We invite the reader to further explore the data, which is made available on Data.World.

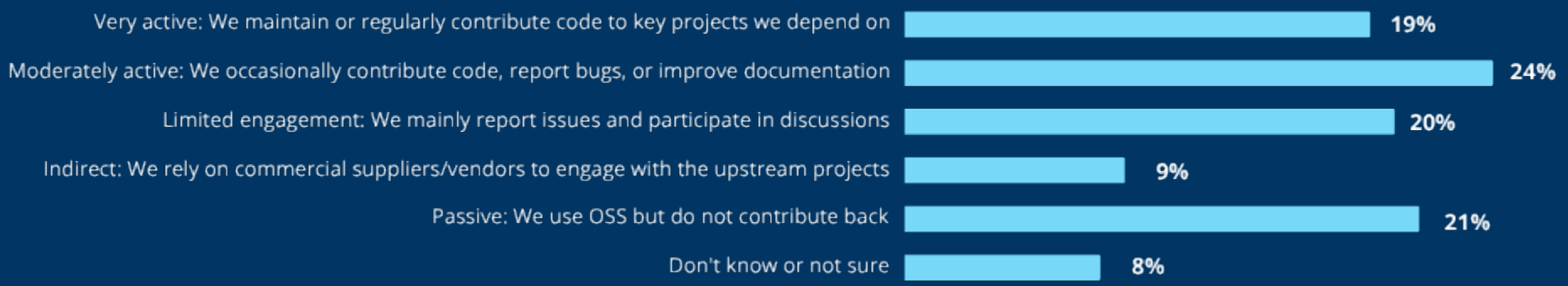
Data.World access

LF Research makes each of its empirical project datasets available on Data.World (http://data.world/thelinuxfoundation). Included in this dataset are the survey instrument, raw survey data, screening and filtering criteria, and frequency charts for each question in the survey. Access to Linux Foundation datasets is free, but it requires you to create a data.world account.

FIGURE 23

ENGAGEMENT LEVELS

Which of the following best describes your organization's engagement with OSS projects?



2025 World of Open Source Survey, Q36, sample size = 841

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Resources

Open source maturity of organizations

- The TODO Group maintains resources that provide guidance regarding OSPOs, including the OSPO book, guides, and a 101 course. See more: https://todogroup.org/
- FINOS provides a number of resources that support organizations in the financial services sector to engage with and contribute to the OSS ecosystem, such as the Open Source Readiness (OSR) handbook, training materials, and the OSR knowledge base. While the resources focus on the financial services sector, they apply more broadly to other sectors, too. See more: https://osr.finos.org/docs/bok/introduction

Meeting points between the open source and policy worlds

- OpenForum Europe (OFE) is a not-for-profit, Brussels-based independent think tank that explains the merits of openness in computing to policymakers and communities across Europe. It supports an independent global network of OpenForum Academy Fellows and hosts a research-focused OpenForum Academy Symposium gathering global researchers focused on open source, policy, and technology impact. OpenForum Europe works closely with the European Commission, the European Parliament, and national and local governments. Every year, OFE hosts the EU Open Source Policy Summit, a unique event that bridges the gap between the highest level of European policymaking with representatives of open source communities and businesses. See more: https://summit.openforumeurope.org/

Funding for OSS

- GitHub Sponsors allows the developer community to financially support the OSS projects they depend on, directly on GitHub, https://github.com/sponsors
- GitHub Secure Open Source Fund, https://resources.github.com/github-secure-open-source-fund/
- thanks.dev is a platform that automatically distributes monthly donations from companies and developers across their open source dependency tree, making it easy to financially support the maintainers of all the projects they rely on rather than just the most popular ones. See more: https://thanks.dev/static/why
- Ben Hoyt, "Canonical + thanks.dev = giving back to open source developers", May 2025, https://canonical.com/blog/canonical-thanks-dev-giving-back-to-open-source-developers
- The Sovereign Tech Agency in Germany invests in the development, improvement, and maintenance of the open digital infrastructure of our economy and society. It comprises several programs, including the Sovereign Tech Fund which funds critical

OSS projects, the Sovereign Tech Resilience program which supports security maintenance of critical OSS projects, and a maintainer-in-residence fellowship program which funds maintainers of critical OSS projects. See more: https://www.sovereign.tech/

- The NGI initiative by the European Commission is a public funding initiative under Horizon Europe, which supports research and development of open internet technologies that support an Internet of Trust. The NGI initiative provided €140 million in funding to over 1,200 projects between 2019 and 2024, and has an additional budget of €32 million allocated for 2024–2027. See more: https://ngi.eu/
- The Digital Infrastructure Insights Fund is a multi-funder initiative by Ford Foundation, Alfred P. Sloan Foundation, Omidyar Network, Schmidt Futures and Open Collective, which funds research that seeks to lead to a better understanding of how open digital infrastructure is built and deployed. See more: https://infrastructureinsights.fund/
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Cybersecurity and CRA readiness

- OpenSSF Global Cyber Policy Working Group, https://github.com/ossf/wg-globalcyberpolicy
- Understanding the EU Cyber Resilience Act (CRA) (LFEL1001), https://training.linuxfoundation.org/express-learning/understanding-the-eu-cyber-resilience-act-cra-lfel1001/
- Alpha-Omega is an associated project of the OpenSSF that is funded by Microsoft, Google, and Amazon with the mission to protect society by catalyzing sustainable security improvements to the most critical OSS projects and ecosystems. See more: https://alpha-omega.dev/
- The Eclipse Foundation's Open Regulatory Compliance Working Group (ORCWG) develops and maintains community resources designed to demystify the CRA and provide practical guidance. See more: https://orcwg.org/
- Adrienn Lawson, Stephen Hendrick, "Unaware and Uncertain: The Stark Realities of Cyber Resilience Act Readiness in Open Source," foreword by Christopher (CRob) Robinson, The Linux Foundation, March 2025. https://www.linuxfoundation.org/research/cra-readiness
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ADRIENN LAWSON serves as Director of Quantitative Research at the Linux Foundation, where she leads data-driven initiatives to understand open source ecosystems. With expertise in social data science from the University of Oxford and a background spanning academic and governmental research, she brings methodological rigor to analyzing distributed collaboration networks. At the Linux Foundation, Adrienn leads a team conducting cross-sectional research across industry verticals and geographic regions to provide comprehensive insights into open source dynamics. Her work encompasses empirical investigations into regulatory compliance, the implications of AI, and sustainable funding models. She produces evidence-based recommendations that inform strategic decision-making within the open source community.

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Appendix

A1: Which technologies do you believe would benefit the most from being open source? (select up to three responses)	Total	North America	Europe	Asia Pacific
Artificial intelligence / Machine learning	38%	40%	38%	31%
Operating systems	36%	38%	43%	23%
Cybersecurity	27%	28%	34%	12%
Cloud / container technologies	23%	19%	23%	29%
Advanced analytics & data science	18%	16%	16%	22%
DevOps / GitOps / DevSecOps	15%	17%	14%	16%
CI/CD & DevOps	14%	14%	17%	13%
Open hardware	13%	16%	16%	8%
Web & application development	13%	9%	5%	31%
Database & data management	12%	13%	9%	16%
IoT & Embedded	12%	13%	13%	11%
Open data / open models	12%	11%	14%	8%
Augmented / virtual reality, 3D simulation, graphics	11%	14%	11%	8%
Networking technologies (5G, SDN, NFV, etc.)	11%	11%	10%	12%
Blockchain	8%	7%	7%	8%
Edge computing	5%	5%	3%	11%
Manufacturing, 3D printing, & CAD / CAM	4%	5%	3%	6%
Storage technologies	4%	4%	2%	7%
Other (please specify)	3%	4%	3%	2%
Don't know or not sure	2%	2%	3%	0%

2025 World of Open Source Survey, Q13 by Q6, Sample Size = 851, Total Mentions = 2,400, some regions were omitted due to low response rates

A2: Which industries would most benefit from investing in open source? (up to three responses)	Total
Information technology (IT vendor, service provider, or manufacturer)	35%
Government (federal, national)	33%
Education (college, university)	30%
Government (state, local)	20%
Telecommunications / Internet service provider (ISP) / web hosting	18%
Healthcare	18%
Education (K-12, primary, secondary)	15%
Business services (accounting, management consulting, legal, etc.)	13%
Financial services (banking, insurance, securities, etc.)	13%
Automotive	11%
Agriculture	9%
Manufacturing (discrete or process)	8%
Life sciences (biotech, pharmaceuticals, etc.)	7%
Construction / engineering	7%
Consumer packaged goods	6%
Media (broadcast communications, entertainment, publishing, website, social networking, etc.)	6%
Utilities / energy	4%
Retail, wholesale, & eCommerce	4%
Hospitality & travel	3%
Other (please specify)	3%

2025 World of Open Source Survey, Q14, Sample Size = 851, Total Mentions = 2,288

A2: Which industries would most benefit from investing in open source? (up to three responses)	Total
Transportation & logistics (other than automotive)	2%
Real estate, rental, & leasing	1%
Mining, oil & gas	1%
Don't know or not sure	3%

2025 World of Open Source Survey, Q14, Sample Size = 851, Total Mentions = 2,288

A3: Which technologies do you believe would benefit the most from being open source? (select up to three responses)	Total	IT	Financial Services	Education	Government	Manufacturing
Artificial intelligence / Machine learning	39%	38%	49%	47%	46%	27%
Operating systems	38%	39%	28%	47%	44%	35%
Cybersecurity	30%	28%	33%	32%	44%	25%
DevOps / GitOps / DevSecOps	16%	15%	23%	18%	18%	10%
Cloud / container technologies	24%	28%	22%	15%	18%	19%
Database & data management	11%	9%	12%	15%	8%	17%
Advanced analytics & data science	18%	21%	18%	13%	13%	11%
Networking technologies (5G, SDN, NFV, etc.)	11%	12%	5%	10%	8%	11%
Open data / open models	12%	13%	9%	10%	10%	11%
Open hardware	11%	9%	8%	10%	18%	19%
Blockchain	8%	7%	14%	8%	0%	10%
IoT & Embedded	11%	9%	10%	8%	15%	22%
Augmented / virtual reality, 3D simulation, graphics	11%	13%	10%	7%	5%	13%
CI/CD & DevOps	14%	15%	19%	7%	13%	16%

A3: Which technologies do you believe would benefit the most from being open source? (select up to three responses)	Total	IT	Financial Services	Education	Government	Manufacturing
Manufacturing, 3D printing, & CAD / CAM	3%	2%	1%	7%	3%	6%
Other (please specify)	3%	2%	1%	7%	5%	3%
Edge computing	4%	3%	6%	5%	3%	8%
Storage technologies	4%	5%	1%	5%	5%	3%
Web & application development	13%	14%	14%	3%	13%	13%
Don't know or not sure	2%	1%	1%	5%	3%	2%

2025 World of Open Source Survey, Q13 by Q10, Sample Size = 591, Total Mentions = 1,672

A4: Which of the following actions has your organization engaged in regarding OSS? (select all that apply)	2025	2024
Defined a clear and visible open source strategy	34%	32%
Joined or associated with open source organizations	34%	29%
Funded open source (via foundation membership, sponsorship of individual developers, donations, FOSS Contributor Funds,	30%	23%
Defined a public position on open source	26%	25%
Implemented an Open Source Program Office (OSPO) or similar open source team	26%	25%
None of the above	23%	23%
Don't know or not sure	14%	17%

2025 World of Open Source Survey, Q12, Sample Size = 851, Total Mentions = 1,597

A5: Which of the following actions has your organization engaged in regarding OSS? (select all that apply)	North America	Europe	Asia-Pacific
Defined a clear and visible open source strategy	40%	34%	39%
Joined or associated with open source organizations	40%	29%	44%
Funded open source (via foundation membership, sponsorship of individual developers, donations, FOSS Contributor Funds,	34%	30%	37%
Defined a public position on open source	35%	22%	30%
Implemented an Open Source Program Office (OSPO) or similar open source team	30%	22%	36%
None of the above	17%	29%	11%
Don't know or not sure	19%	13%	4%

2025 World of Open Source Survey, Q12, Sample Size = 742, Total Mentions = 1,453, some regions were omitted due to low response rate

A6: Which of the following actions has your organization engaged in regarding OSS? (select all that apply)	1 to 249	250 to 9,999	10,000 or more
Defined a clear and visible open source strategy	31%	35%	39%
Joined or associated with open source organizations	30%	32%	43%
Funded open source (via foundation membership, sponsorship of individual developers, donations, FOSS Contributor Funds,	27%	30%	36%
Implemented an Open Source Program Office (OSPO) or similar open source team	16%	28%	39%
Defined a public position on open source	27%	26%	27%
None of the above	30%	21%	14%

2025 World of Open Source Survey, Q12, Sample Size = 840, Total Mentions = 1,584

A7: What are your top expectations from a support provider when using open source technologies in production? (select up to three responses)	
Long-term support (LTS) guarantees	53%
Fast security patching and updates	47%
Documentation and knowledge base access	42%
Expert troubleshooting assistance	31%
Integration support with existing systems	23%
SLA-backed response times	20%
Roadmap visibility and influence	19%
Training and certifications	16%
Custom feature development	12%
Other (please specify)	1%
Don't know or not sure	4%

2025 World of Open Source Survey, Q32, Sample Size = 851, Total Mentions = 2,269

A8: In which environments would you consider paid support for OSS to be essential? (select all that apply)	
Mission-critical workloads	54%
Systems handling sensitive data	43%
Regulated industry environments	38%
Cloud infrastructure	35%
Customer-facing applications	29%
Edge/IoT deployments	17%
Developer tooling	16%

2025 World of Open Source Survey, Q35, Sample Size = 851, Total Mentions = 2,111

A8: In which environments would you consider paid support for OSS to be essential? (select all that apply)	
We do not consider paid support essential	8%
Other (please specify)	1%
Don't know or not sure	7%

2025 World of Open Source Survey, Q35, Sample Size = 851, Total Mentions = 2,111

A9: In which environments would you consider paid support for OSS to be essential? (select all that apply)	North America	Europe	Asia-Pacific
Mission-critical workloads	59%	53%	44%
Systems handling sensitive data	40%	40%	42%
Regulated industry environments	43%	33%	40%
Customer-facing applications	33%	22%	34%
Cloud infrastructure	32%	38%	31%
Edge/IoT deployments	15%	14%	27%
Developer tooling	19%	10%	23%
We do not consider paid support essential	7%	12%	4%
Other (please specify)	1%	1%	1%
Don't know or not sure	10%	9%	2%

2025 World of Open Source Survey, Q35, Sample Size = 742, Total Mentions = 1,828, some regions were omitted due to low response rates

A10: What actions does your organization usually take before using a new OSS component? (select all that apply)	Total
We check the activity level of the project community (contributors, commits, etc.)	44%
We look at the frequency of releases	37%
We evaluate the direct dependencies of the OSS code to determine if it's too risky to use	36%

A10: What actions does your organization usually take before using a new OSS component? (select all that apply)	Total
We look at repository ratings or package downloads statistics	36%
We evaluate the source code using automated tools (SCA, SAST, Fuzz Testing, web app scanners, etc.)	31%
We manually review/inspect the source code	28%
We evaluate the transitive dependencies of the OSS code to determine if it's too risky to use	25%
We check the component against internal risk policies	24%
We check if the project has a responsible disclosure policy (such as a SECURITY.md)	20%
We don't review or evaluate the OSS components that we use	5%
Don't know or not sure	15%

2025 World of Open Source Survey, Q25, Sample Size = 851, Total Mentions = 2,565

A11: If your organization were to invest more in OSS over the next year, what would you prioritize funding or resourcing? (select up to three responses)	Total	1 to 249	250 to 9,999	10,000 or more
Sponsoring critical OSS projects your organization depends on	44%	46%	43%	44%
Training for developers on OSS usage and contribution	41%	35%	44%	44%
Increasing upstream collaboration and contributions	39%	38%	36%	45%
Hiring or designating full-time OSS maintainers in-house	29%	24%	33%	30%
Improving compliance and legal review processes for OSS	23%	17%	25%	27%
Joining or upgrading foundation memberships	19%	20%	17%	22%
My organization does not plan to increase OSS investment	12%	15%	11%	9%
Other (please specify)	1%	1%	1%	3%
Don't know or not sure	5%	6%	3%	8%

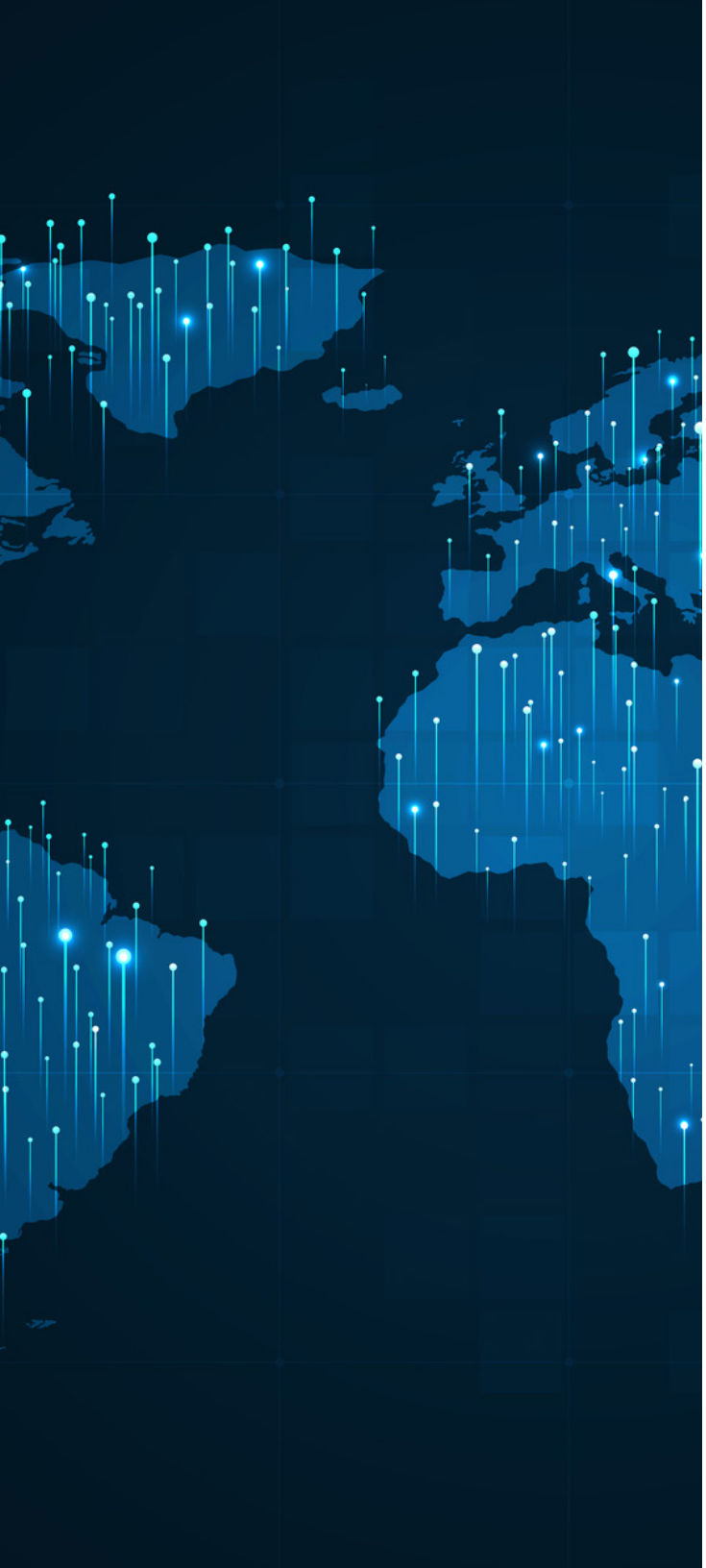
2025 World of Open Source Survey, Q22 by Q11, Sample Size = 840, Total Mentions = 1,798

A12: Which of the following factors limit OSS contributions in your organization? (select all that apply)	Total
A fear of leaking intellectual property (IP)	33%
Legal or licensing concerns	33%
Uncertain return on investment	29%
Technology constraints and challenges	28%
A lack of policy or training materials	22%
Other (please specify)	13%
Don't know or not sure	15%

2025 World of Open Source Survey, Q44, Sample Size = 851, Total Mentions = 1,472

A13: Which of the following factors limit OSS use in your organization? (select all that apply)	Total
Licensing of intellectual property (IP) concerns	37%
A lack of technical support for open source solutions	36%
Concerns about the security of OSS components	33%
A lack of understanding of the non-technical value proposition	33%
A lack of a clear policy or supporting training and guidance on how to use OSS	32%
Concerns about the quality of OSS components	30%
External regulations or other formal restrictions	24%
Other (please specify)	7%
Don't know or not sure	9%

2025 World of Open Source Survey, Q29, Sample Size = 851, Total Mentions = 2,037



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