

2024 Global DevSecOps Report

What's next in DevSecOps for financial services

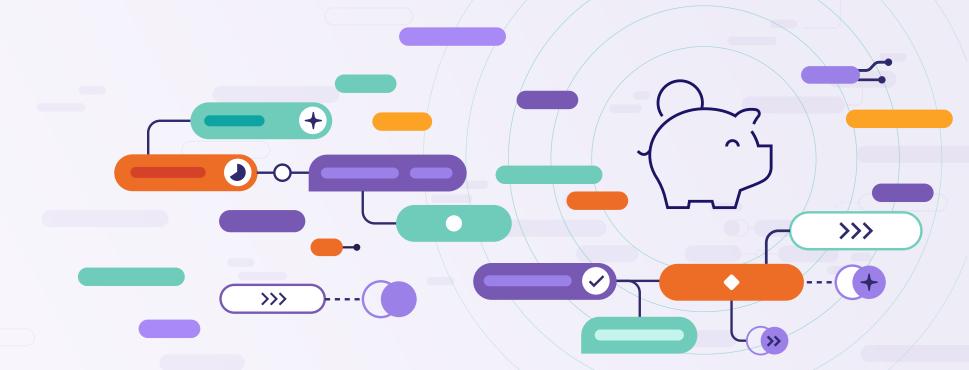
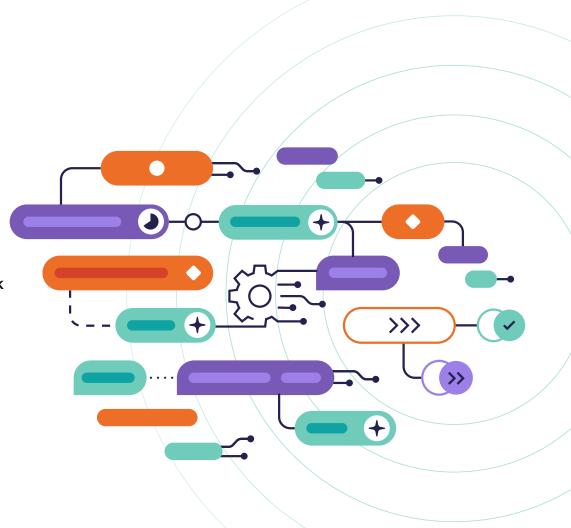


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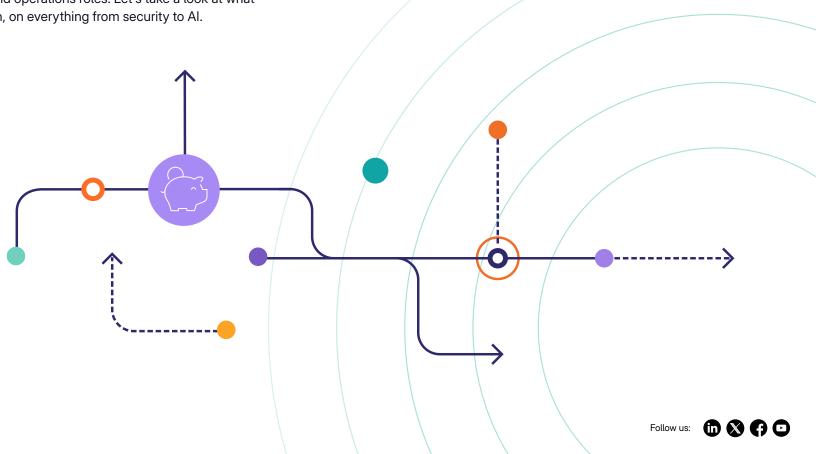


What's next in DevSecOps for financial services

It's clear from our survey of more than 5,000 DevSecOps professionals that artificial intelligence (AI), security, and automation are top of mind for organizations across the board.

But what about the financial services industry? This industry has some unique challenges and needs — including staying on top of ever-changing regulations, protecting sensitive data, maintaining customer trust, managing legacy systems, attracting and retaining top engineering talent, and keeping up with more nimble competitors — that could make their progress and priorities a bit different.

We analyzed 770 survey responses from financial services industry professionals across development, security, and operations roles. Let's take a look at what they're doing and struggling with, on everything from security to Al.





Investing in security, AI, and automation

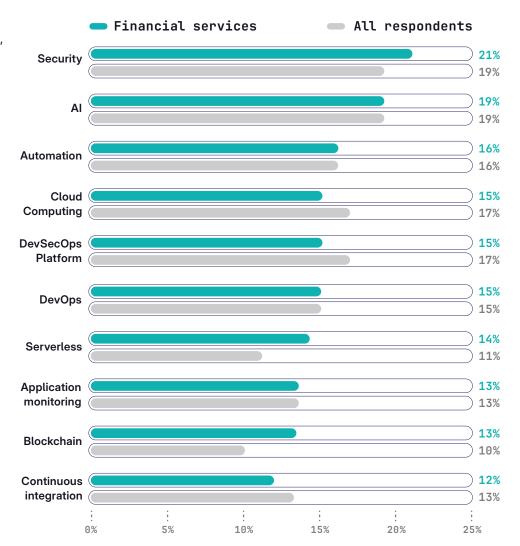
Not surprisingly, security was the most commonly cited investment priority for respondents in financial services.

Al was their second most common investment priority, which makes sense given the plans that many in the industry have for the next few years around innovation, operational efficiency, and simplification.

Top investment priorities for financial services in 2024:

- 1. Security
- 2. AI
- 3. Automation

What are your organizations top 3 IT investment priorities in 2024?

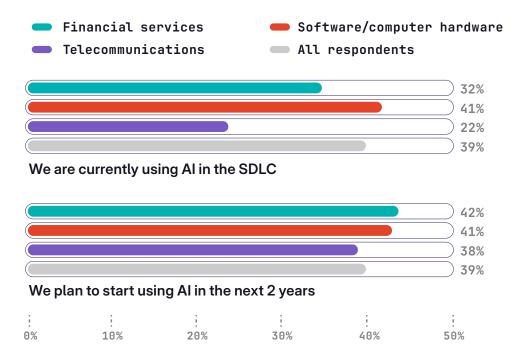




Catching up on Al

According to our survey, the financial services industry is a little behind in adopting AI in the software development lifecycle (SDLC) compared to other industries. Only 34% of respondents in financial services said they were currently using AI in software development, compared to 39% of respondents across all industries.

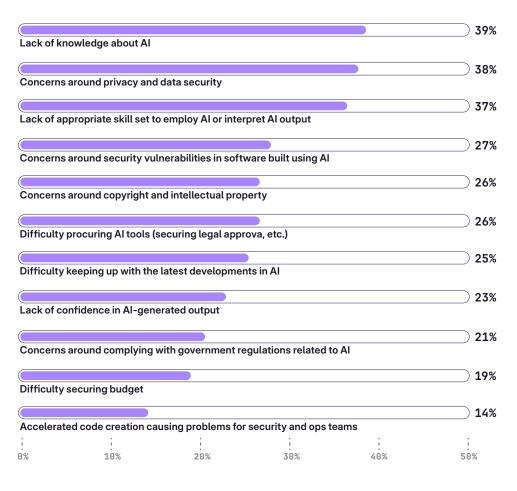
Is your organization using or planning to use AI in the software development lifecycle?



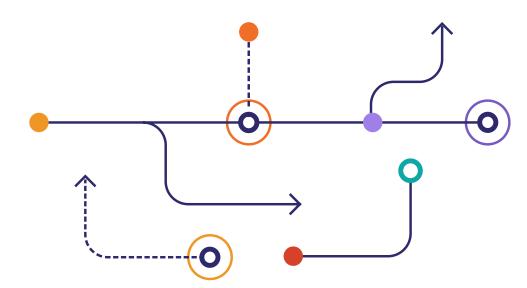
However, they're planning to nearly close that gap. More than three-quarters (76%) of financial services respondents are currently using AI or plan to in the next two years, similar to what we observed across all industries (78%).

Is there anything that may be preventing deeper adoption of AI in financial services? Three key challenges stood out in our survey. Respondents in financial services who have used AI in software development said the top obstacles they face are a lack of knowledge about AI, concerns around privacy and data security, and a lack of skills needed to use AI.

What are the top obstacles your organization has encountered using AI in the SDLC? (according to financial services)



These concerns probably aren't surprising. Because of the highly sensitive nature of the data they work with, the financial sector is laser focused on privacy and security, making many organizations more cautious about adopting AI. It appears that for some organizations this heightened caution has led them to be a bit behind in investigating AI, as "lack of knowledge around AI" was the most common obstacle cited by respondents in financial services. As more DevSecOps teams in the industry plan to adopt AI across their SDLC, focusing on closing this knowledge gap could be an excellent opportunity to ensure a smooth transition.





Integrating AI into all aspects of software development

Software engineering teams in financial services are eager to adopt generative AI to help them accelerate code creation. The top use cases where financial services respondents told us they're currently using AI were code generation and code suggestions, followed by explanations of how code works, and to modernize legacy code, which was a uniquely popular answer among financial services respondents. This need to modernize highlights one of the industry's unique challenges, and opportunities, when it comes to AI.

Top ways finanical services respondents are currently using AI:

62%

Code generation and code suggestions/ completion

50%

Summaries of code changes

47%

Explanations of how a piece of code works

46%

Moderizing legacy code

41%

Chatbots that allow users to ask questions in documentation using natural language

When asked how they are planning to use or are interested in using AI, this year's financial services respondents identified a different set of use cases, including forecasting productivity metrics and identifying anomalies, chatbots that allow users to ask questions in natural language, and suggestions for who can review code changes.

Chatbots appeared in both the top five current use cases and the top five use cases that respondents were interested in, suggesting that natural-language chat interfaces are an appealing way for DevSecOps teams to engage with Al tools.

Top ways finanical services respondents are interested in using AI:

41%

Forecasting productivity metrics and identification of anomalies across the software development lifecycle

38%

Chatbots that allow users to ask questions in documentation in natural language

37%

Suggestions for who can review code changes

36%

Summaries of code changes

35%

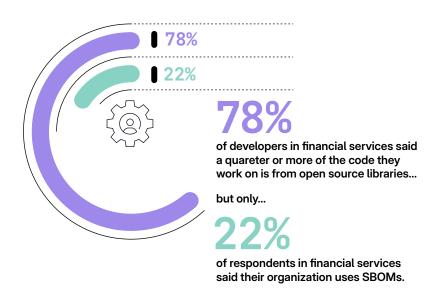
Summaries of issue comments



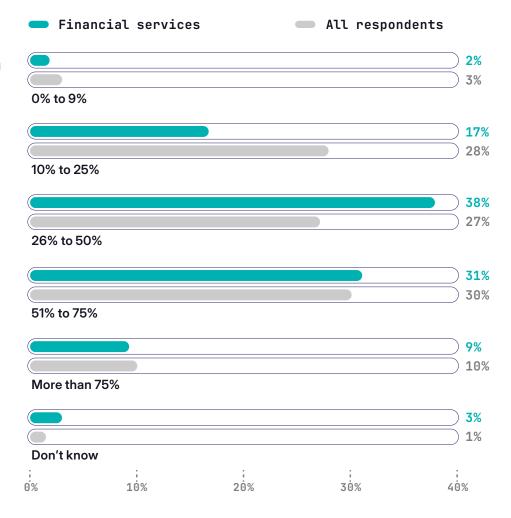
Software supply chain security is a potential weak spot

Within the financial services industry, 78% of developers said a quarter or more of the code they work on is from open source libraries. That's higher than average, with only 67% of developers across all industries reporting that a quarter or more of the code they work on is from open source libraries.

Capabilities like a software bill of materials (SBOM) — a list of all the components, libraries, and modules that make up an application — are essential for maintaining the security of the software supply chain, especially as the amount of code pulled from open source libraries increases. However, in our survey, only 22% of respondents in the financial services industry said their organizations are currently using SBOMs to enable security in the SDLC.



Approximately how much of the code in the applications you work on is from open source (OSS) libraries?



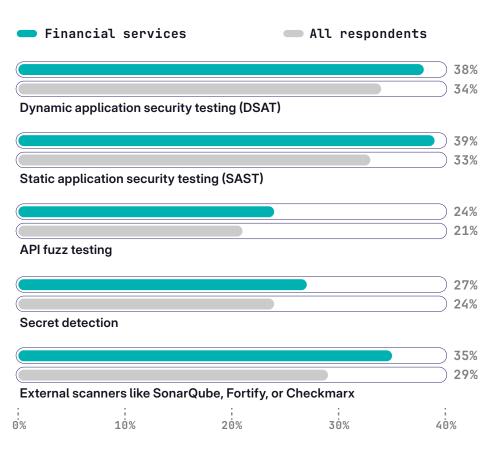




Security is a priority, but still a challenge

In this year's survey, we found that the financial services industry is a bit ahead of the curve when it comes to using many security-related technologies.

How does your organization enable security in the SDLC?



However, they aren't more likely to feel confident about their team's security. Only 60% of respondents in financial services said they are confident in their organization's approach to application security, compared to 60% of respondents across all industries, and 67% in the software/computer hardware industry.

Why isn't the financial services industry more confident in their approach to security? The results from our survey point to a possible cultural gap around security.

Of the security professionals in financial services who took the 2024 Global DevSecOps Survey:



Only 18% said their organization has shifted security left.



More than half (54%) said their security team has a difficult time getting the development team to prioritize vulnerability remediation.



Only 14% said they have developers run dynamic application security testing (DAST), compared to 17% across all industries and 26% for the software/computer hardware sector.



Less than half (49%) said security vulnerabilities are a performance metric for developers, compared to 57% across all industries.



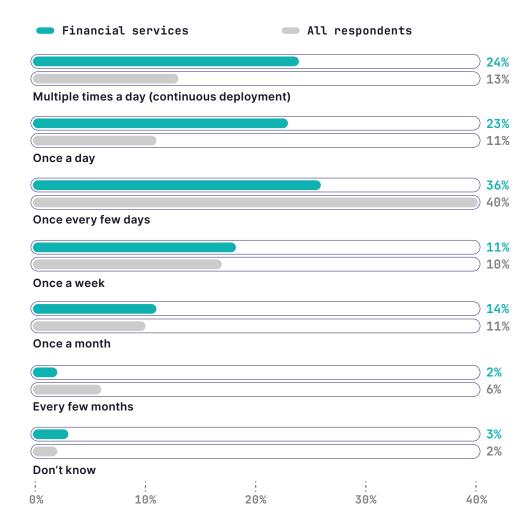


Leading the way on frequent deployments

Financial services is leading the way on frequent deployments. A full 40% of developers in this sector said their organization deploys multiple times per day or once a day, compared to 28% for the software/computer hardware sector and 25% across all industries. Many in financial services have been investing in deployment automation and continuous delivery over the years, and it seems to be paying off.

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How often does your organization deploy to production? (according to developers)







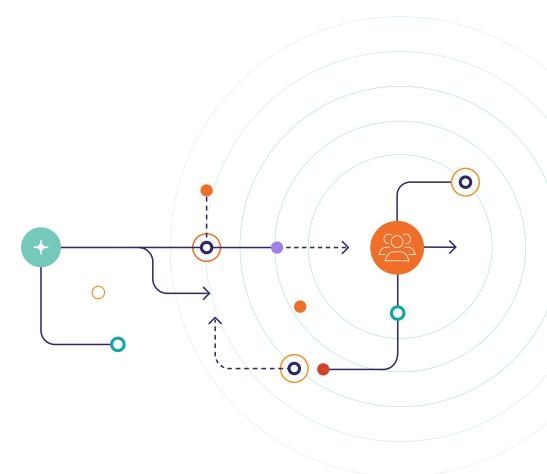
Hiring, retaining, and onboarding are challenges

The financial services industry is having a somewhat harder time recruiting and keeping developers. A third (more than 33%) said it was somewhat or very difficult for their organization to attract, hire, and retain developers, compared to 29% of respondents across all industries and 28% for the software/computer hardware industry.

What's more, once a financial services organization hires a developer, it tends to take longer to onboard them and get them up to speed. Only 18% said their organizations onboard developers in less than a month, compared to 29% across all industries and 35% in the software/computer hardware industry.

How long does it take to onboard new developers in your organization and get them up to speed on all your tools and processes?





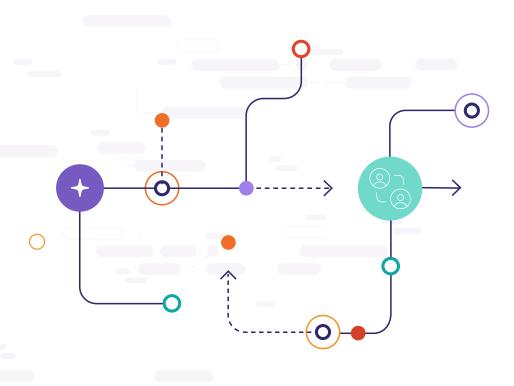


Developers want automation, collaboration, and flexible work

When asked how their organizations can improve the developer experience, developers in financial services were clear: expand automation, improve collaboration, and give them the flexibility to work remotely. Of note, developers in financial services were more likely to select "more flexible work arrangements (e.g., remote or hybrid work)" than their peers in other industries - 25% of developers in financial services noted it, compared to 22% across all industries.

Many developers in financial services say they are bogged down by repetitive tasks and context switching, so it's not surprising that they want to be empowered with more automation and Al. Adding that automation to a more flexible work day could unlock a new level of productivity and developer experience.

Top challenges that could be made to improve developer satisfaction, according to developers in financial services:











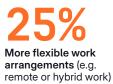






















Demographics and methodology

We collected a total of 5,315 survey responses in April 2024 from individual contributors and leaders in development, IT operations, and security across a mix of industries and business sizes worldwide.

We used two sampling methods for the data collection:

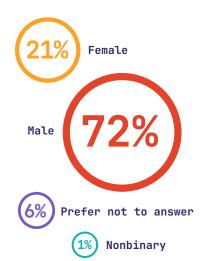
- We distributed the survey via GitLab's social media channels and email lists.
- A third-party research partner, Omdia, conducted panel sampling, which reduces bias in the sample. Omdia used its proprietary access to lists, panels, and databases to gather quality responses and cleaned the data throughout fielding to ensure data quality.

Here's a closer look at the survey respondents:

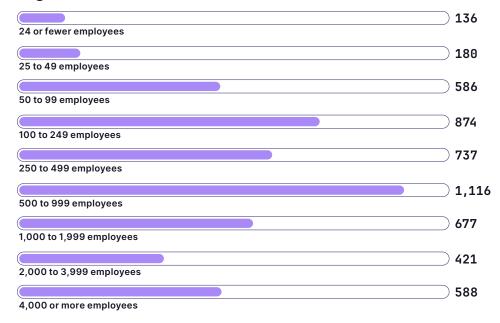
Functional area



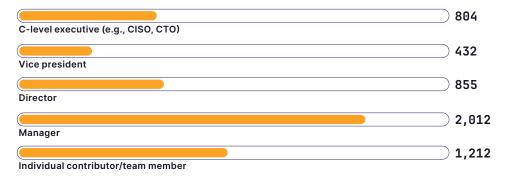
Gender



Organization size



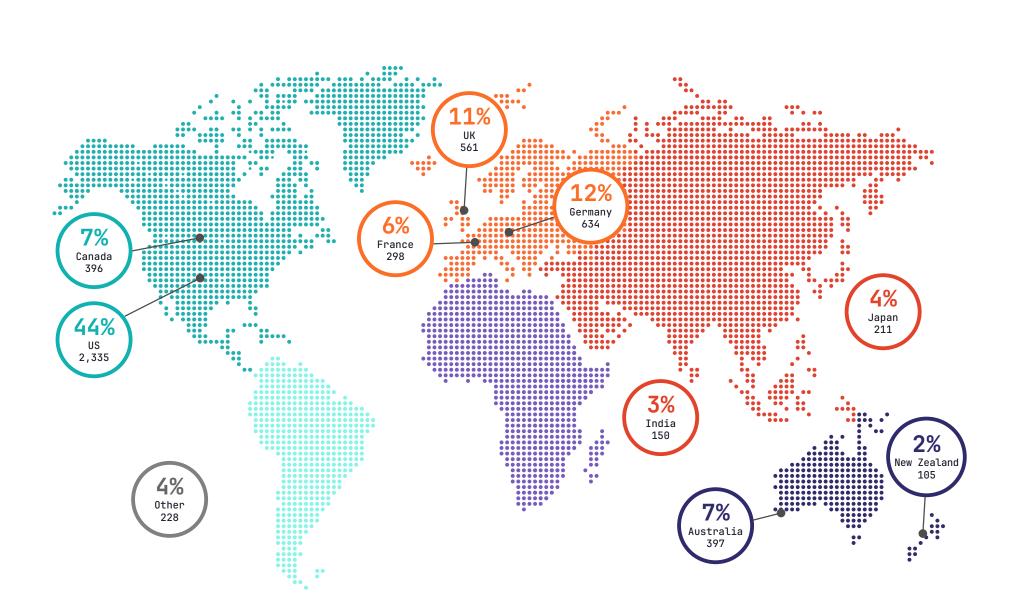
Job role







Geography



Industry

	1,147
Software/SaaS/Computer Hardware	
	532
Financial Services/Banking	
	515
Telecommunications	
	503
Automotive	
Government	419
Aerospace & Defense	268
	243
Manufacturing	
	242
Retail	
	238
Insurance	
Healthcare	227
neatticate	
Biotechnology/Pharmaceuticals	202
	100
Business Services/Consulting	198
	160
Energy & Utilities	
	156
Education	
	135
Media & Entertainment	
	106
Hospitality/Travel/Food & Beverage	
Others	24



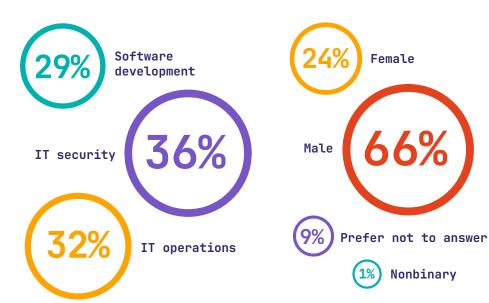
Demographics of financial services respondents

Nonbinary

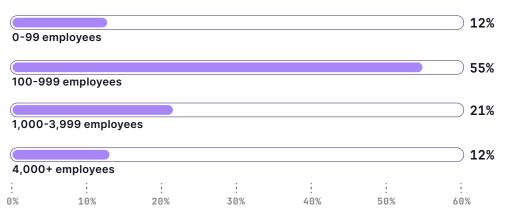
Gender

Let's take a closer look at the 770 survey respondents in the financial services industry.

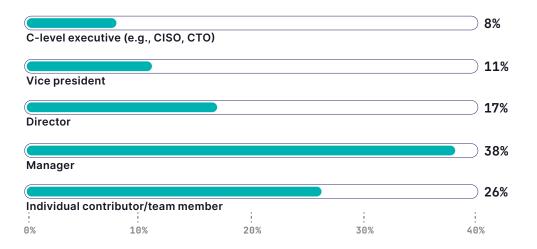
Functional area



Organization size



Job role



Geography of financial services respondents

