Deep cloud observability and advanced AIOps are key to scaling DevOps practices

Global DevOps Report: Financial Services

Introduction

The financial services industry is witnessing unprecedented digital change. Driven by rapidly evolving customer demands and pressure from agile FinTech players, the focus today is on automation, self-service, and innovative new delivery models. As operations shift from face-to-face to digital experiences, so the burden on DevOps and Site Reliability Engineering (SRE) teams grows. They're tasked with the sometimes impossible requirements of meeting service level objectives (SLOs) while accelerating time-to-value and improving software quality. But manual processes and organisational silos continue to eat up time and resources and block progress. Without a rethink, these teams will continue to struggle in delivering digital transformation for the business. To keep pace with the insatiable demands of the market, financial services IT teams need a new approach to improving the quality of their output, and accelerating the frequency and speed of delivery.

This report highlights in more detail the challenges facing DevOps and SRE teams. It reveals how these can be overcome with capabilities such as full-stack observability, automation, and AI — delivered from a single platform.
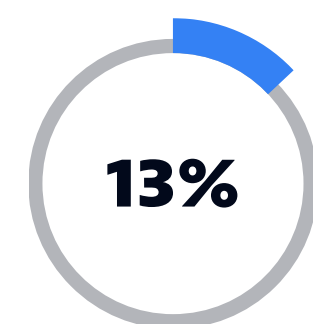
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DevOps is critical to meet the rising pressure to innovate faster

Financial services firms are under increasing pressure to drive faster innovation and deliver new digital experiences to their customers, partners, and employees. In response, DevOps and SRE practices are becoming increasingly critical. Financial organisations have already made great progress driving DevOps across their applications, but need to scale these efforts further to deliver new products and services with maximum speed, quality, and reliability.
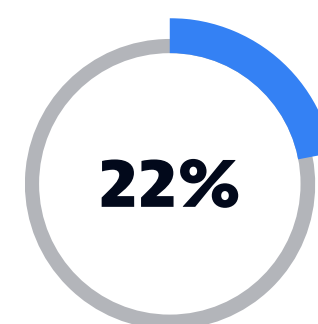
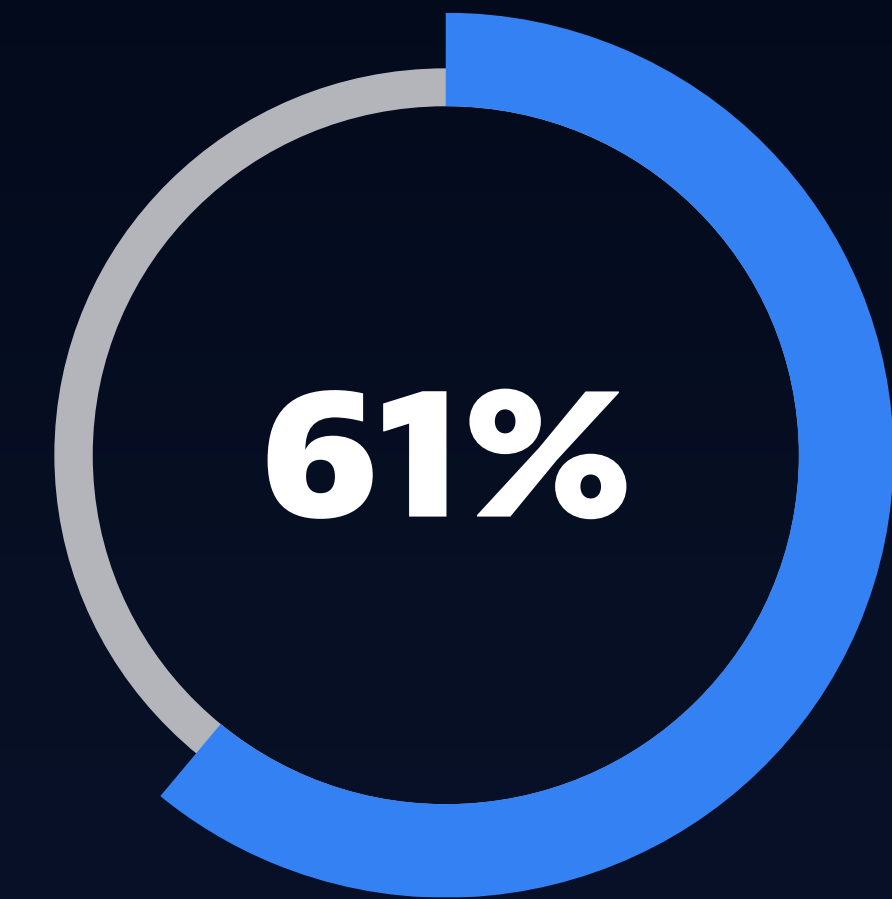**Frequency of software releases in financial services organisations**

13%
Between once per day and once per week
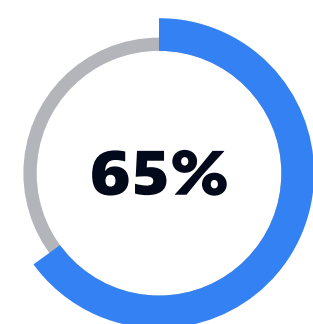
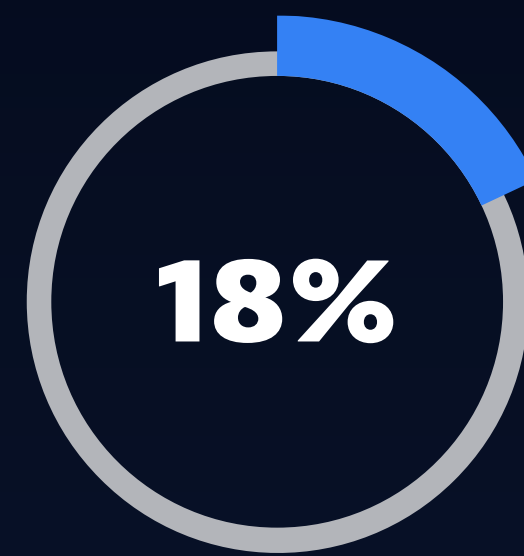**65%**
Between once per week and once per month

22%
Between once per month and once per quarter

61%

expected increase in the frequency of software releases within the next two years by financial services firms

DevOps is critical to meet the rising pressure to innovate faster in financial services

18%

of respondents working in financial services admit they are often under so much pressure to meet the demand for faster innovation they must sacrifice code quality

100

of DevOps leaders in financial services say extending DevOps to more applications is key for digital transformation and customer experience
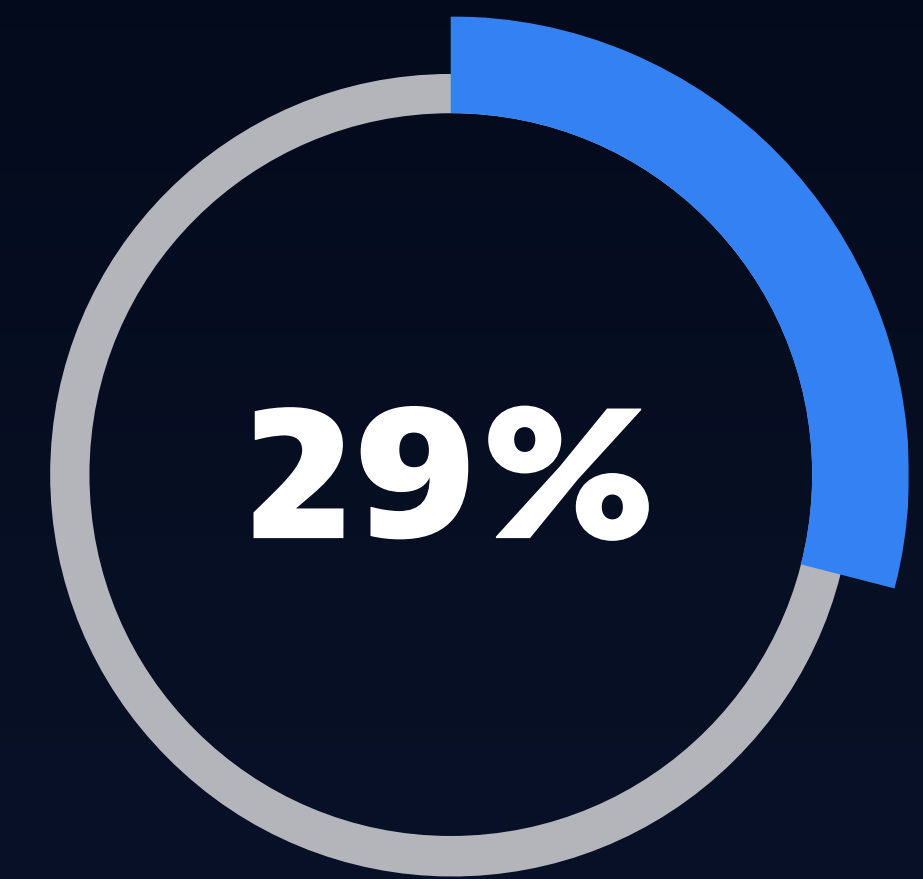
43%
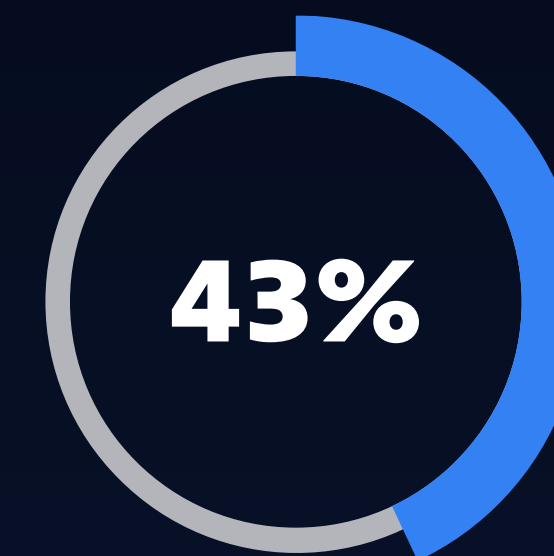
of applications in the financial services industry will be fully DevOps enabled by 2023

Reducing friction for developers is critical to digital transformation in financial services

Despite their continued efforts to accelerate innovation, DevOps teams in financial services are held back by siloed and often conflicting data insights, as well as time-intensive, manual CI/CD processes.

This includes a heavy reliance on human intervention in key stages of delivery, such as quality assurance and incident response, which makes DevOps teams more reactive than proactive, and reduces the time they have available for more value-driven tasks. As they seek to address this, financial services firms are realising that automation across the software development lifecycle and breaking down team silos are key to meeting the demand for faster innovation.
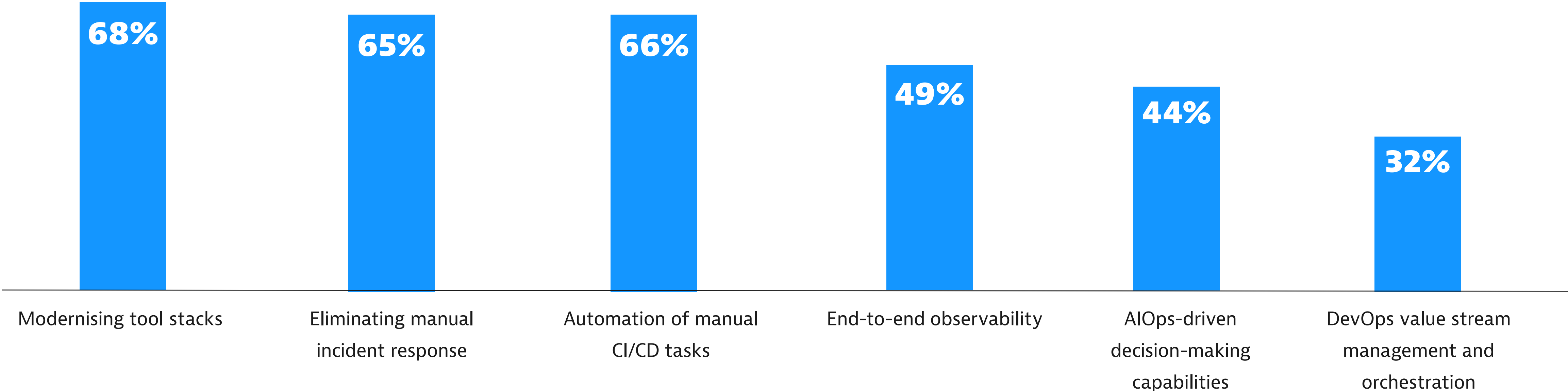
29%

of IT and DevOps teams' time is spent on manual CI/CD tasks like detecting code quality issues - reducing time spent on financial services innovation
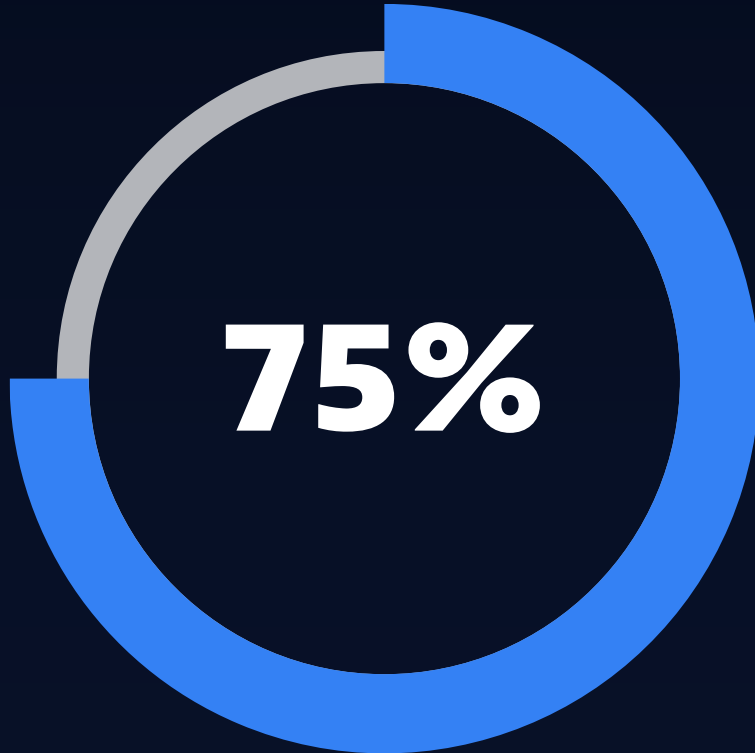
Reducing friction for developers is critical to digital transformation in financial services

To boost developer productivity, experience, and quality of life, DevOps leaders in financial services are investing in:

| 68%	65%	66%	49%	44%	32%
Modernising tool stacks	Eliminating manual incident response	Automation of manual CI/CD tasks	End-to-end observability	AIOps-driven decision-making capabilities	DevOps value stream management and orchestration

Reducing friction for developers is critical to digital transformation in financial services

75%

say siloed team culture
is a barrier to DevOps success

58%
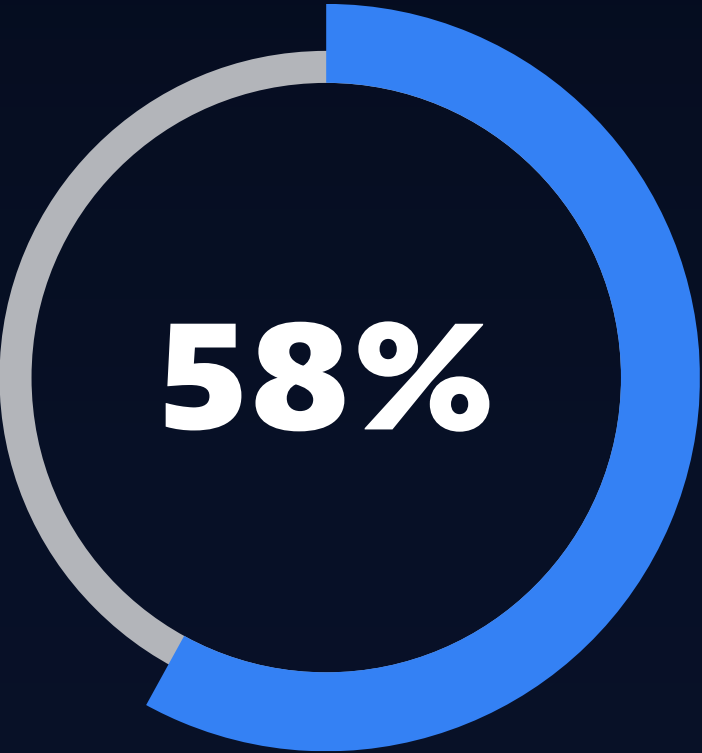
say application complexity is a
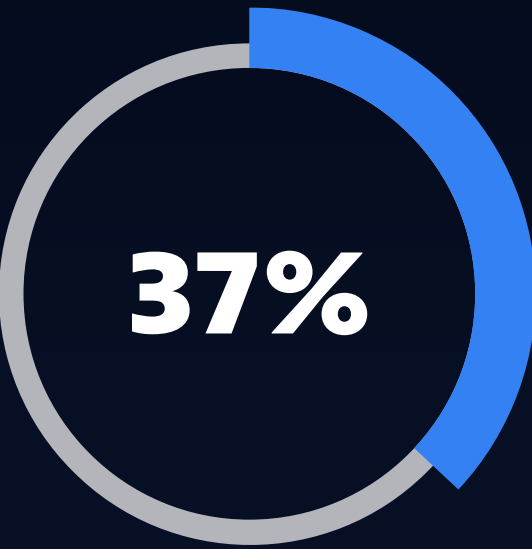barrier to DevOps success

Chapter 3:

A unified toolchain is key to DevOps success

The increased prevalence of DevOps and continued adoption of cloud-based services has also resulted in larger, more complex, and fragmented toolchains across the software development lifecycle. This is hindering DevOps and SRE teams' ability to work more effectively and maximise their output. To keep up with the rapidly accelerating speed of innovation, financial services organisations need to find a way to unify their toolchain and provide more intuitive solutions that allow teams to perform key tasks with ease. This will enable their teams to shorten development cycles, release faster, and refocus their efforts on activities that create more value for the business.
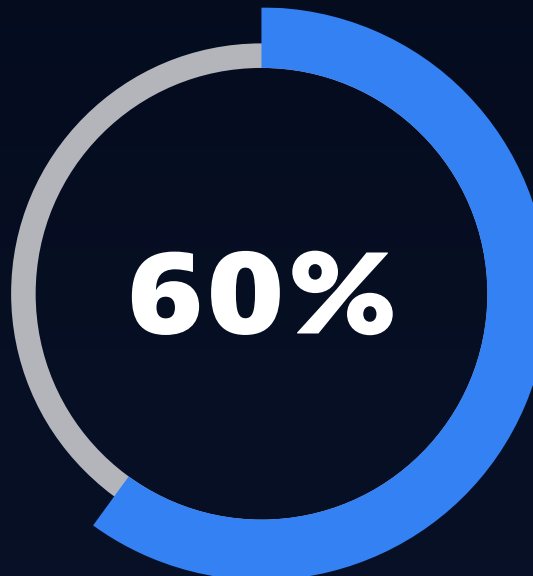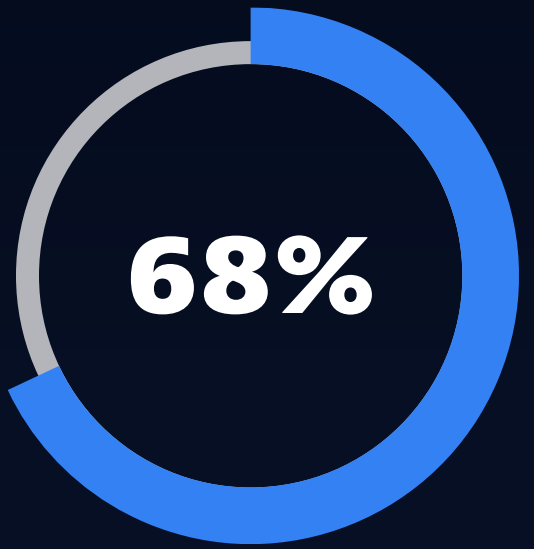
A unified toolchain is key to DevOps success

37% of respondents say toolchain complexity is a barrier for DevOps success

60% of respondents say their DevOps toolchains are becoming increasingly fragmented and impeding their ability to accelerate innovation

**68%** of respondents say modernising their tool stacks is a priority for increasing developer productivity
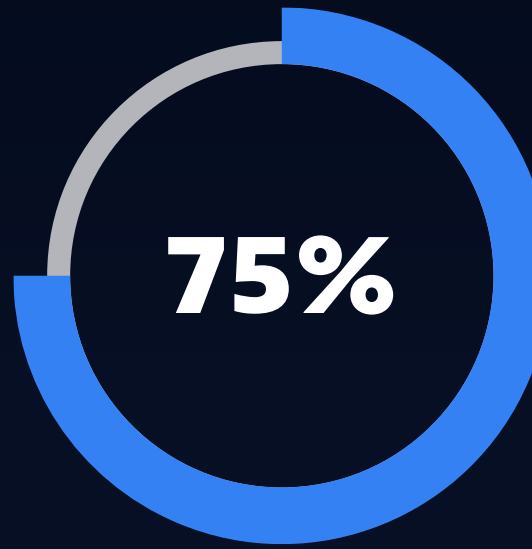
**75%** of respondents say increased automation will be essential to managing and operating their DevOps toolchains in the future

AI-augmented DevOps is essential to balancing speed and quality

With a growing list of responsibilities, and more demands than ever on their time, DevOps and SRE teams often find themselves under pressure to make a trade-off between maintaining quality and accelerating delivery. In an age of 24/7 connectivity, when customers have an increasingly low tolerance for poor digital experiences, this introduces unacceptable business risk. Therefore, financial organisations urgently need a new approach to software delivery so their teams don't have to choose between quality or speed. This approach must augment human teams with AI and continuous automation capabilities that enable them to drive faster, more secure release cycles with greater confidence and less risk.
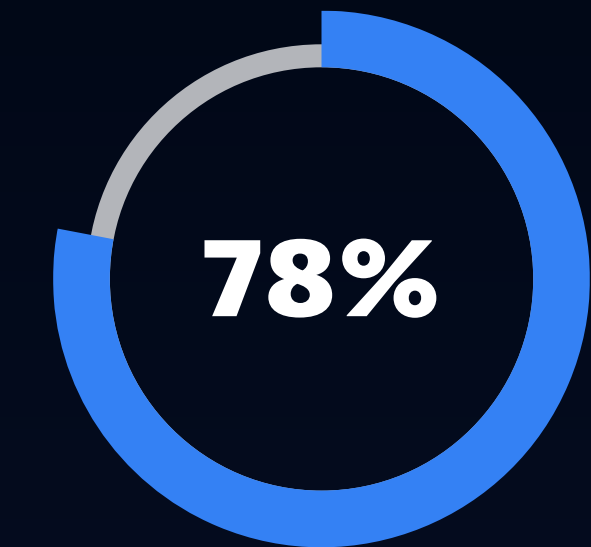
78%

of respondents in financial services say extending AIOps beyond traditional use cases will play a critical role in the future success of DevOps and SRE teams
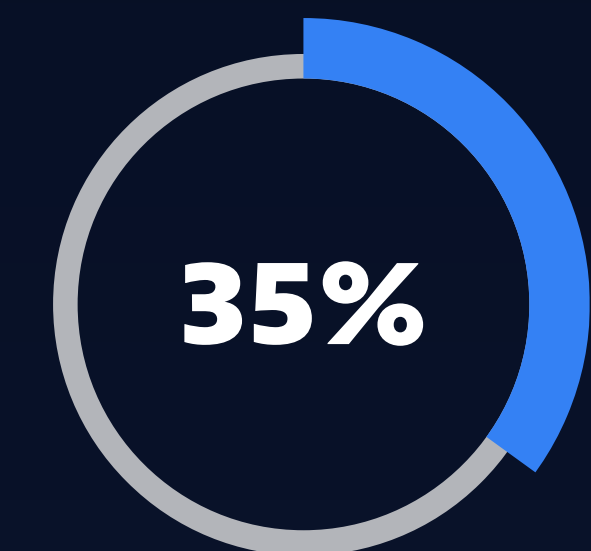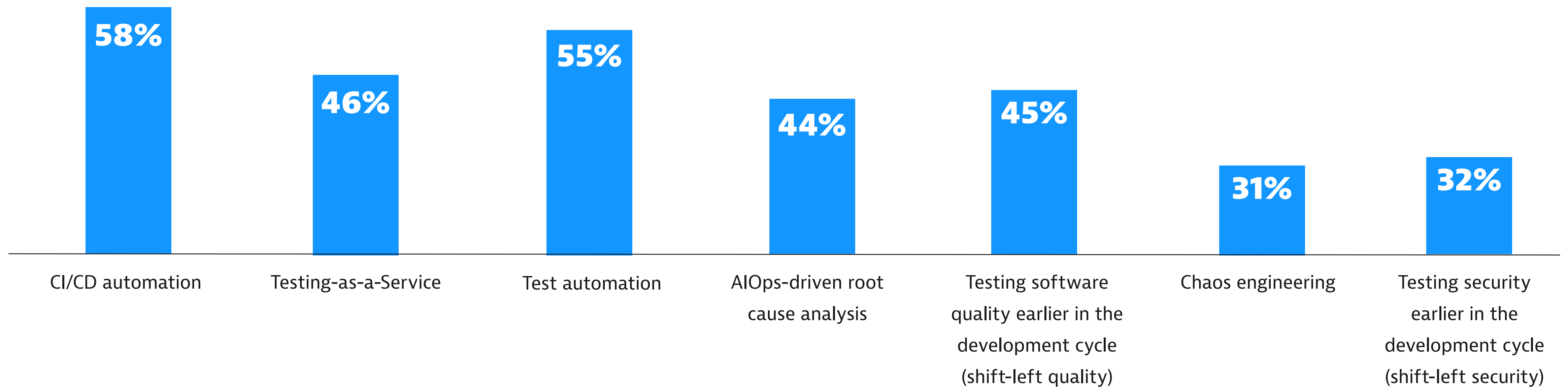
35%

is the average increase in investment that financial services firms are set to make in automating code delivery, deployment, and remediation across DevOps pipelines by 2023

AI-augmented DevOps is essential to balancing speed and quality

DevOps leaders are investing in the following to boost confidence in quality of software releases:

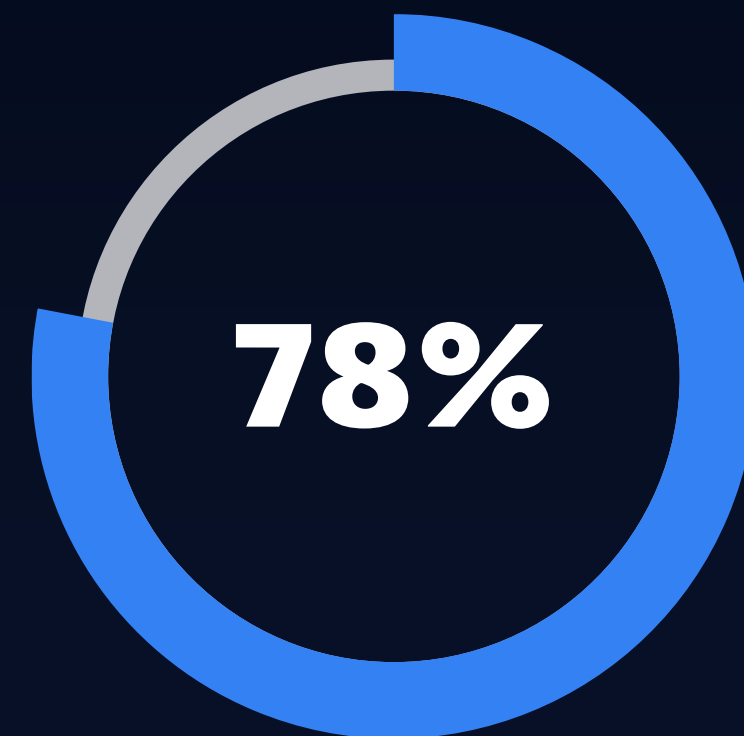| CI/CD automation	Testing-as-a-Service	Test automation	AIOps-driven root cause analysis	Testing software quality earlier in the development cycle (shift-left quality)	Chaos engineering	Testing security earlier in the development cycle (shift-left security)
58%	46%	55%	44%	45%	31%	32%

Chapter 5:

Deeper, broader observability will enable DevOps at scale in financial services

Many financial institutions are still struggling to scale DevOps adoption from a series of lighthouse projects to a true enterprise-wide culture and methodology. As they work to create more scalable DevOps and SRE practices, financial businesses are investing in maturing their observability capabilities. They are also looking for new ways to empower their teams with a single source of truth throughout the entire software development lifecycle, which enables better collaboration and greater productivity. As a result, their teams will be able to deliver higher quality software, shorten development cycles, and have more time available to drive innovation.
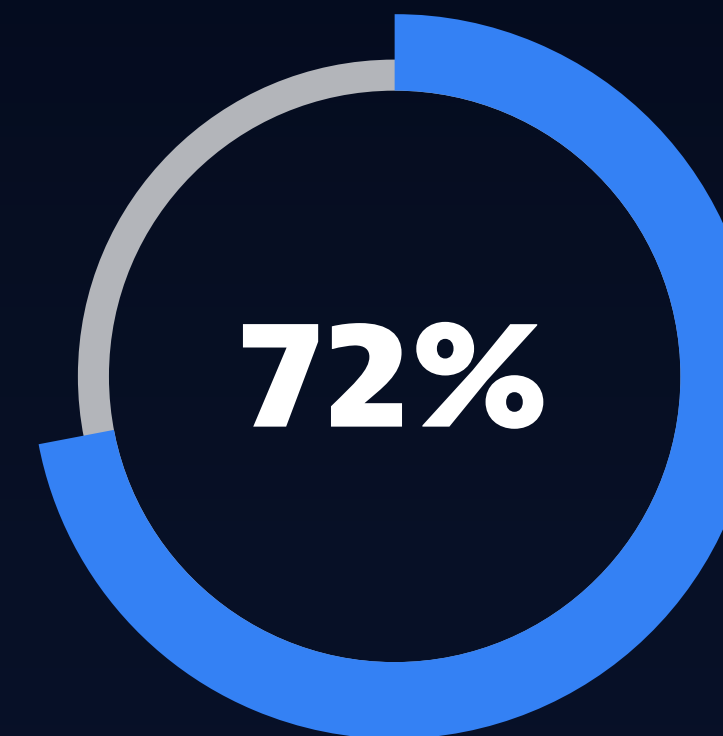
Deeper, broader observability will enable DevOps at scale in financial services

78%

72%

say end-to-end observability will be essential to DevOps in the future

say a unified end-to-end platform that seamlessly integrates their toolchains will be critical to their ability to scale DevOps beyond a single lighthouse project

The Dynatrace difference

The Dynatrace® platform combines observability across the full software development lifecycle with application security and advanced AIOps. Precise, AI-driven answers and continuous automation free development, DevOps, and SRE teams from time-consuming, manual tasks, while helping to ensure releases maintain the highest levels of security and reliability. With a single source of truth, these teams can now collaborate more effectively to deliver high-quality, innovative software faster.

Why Dynatrace is radically different:

Automatic

Zero-touch configuration, continuous discovery, and topology mapping in real time, with instant answers and precise causation.

Intelligent

Explainable AI engine, Davis®, which is built into the core of the Dynatrace® platform, processes billions of dependencies for instantly precise answers, prioritized by business impact and with root-cause determinization.

Full stack

Understand all the relationships and interdependencies, top to bottom — from cloud infrastructure, applications and microservices, to end-user experience.

Enterprise scale

Automatic, enterprise-wide deployment with support for latest cloud-native architectures and role-based governance.

Automatic and intelligent observability for hybrid multiclouds

We hope this ebook has inspired you to take
the next step in your digital journey.

Dynatrace is committed to providing enterprises the data and intelligence they need to be successful with their

enterprise cloud and digital transformation initiatives, no matter how complex.

Learn more   If you are ready to learn more, please visit dynatrace.com/platform for assets, resources, and a **free 15-day trial.**

About Dynatrace

Dynatrace provides software intelligence to simplify cloud complexity and accelerate digital transformation. With automatic and intelligent observability at scale, our all-in-one platform delivers precise answers about the performance and security of applications, the underlying infrastructure, and the experience of all users to enable organizations to innovate faster, collaborate more efficiently, and deliver more value with dramatically less effort. That's why many of the world's largest enterprises trust Dynatrace® to modernize and automate cloud operations, release better software faster, and deliver unrivalled digital experiences.

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