



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

Global DevOps Report: Retail



Introduction

The retail sector stands at a crucial point in its development. Customer expectations are sky-high, and after a pandemic where digital commerce became the de facto model, competition for hearts, minds and wallets is fierce. For some retail customers, experience may even trump price and products. That makes rapid, seamless development of new services a must-have. For DevOps and Site Reliability Engineering (SRE) teams, the pressure is greater than ever. Too often, they are still restricted by legacy processes and siloed cultures, unable to scale and support the digital transformation demanded by business managers and customers. A new approach is required to meet these spiralling demands and empower teams to accelerate time-to-market while producing higher quality software more frequently.

The following report reveals in more detail the challenges facing DevOps and SRE teams. And it shows how these can be overcome with capabilities such as full-stack observability, automation, and AI — delivered from a single platform.

What's inside

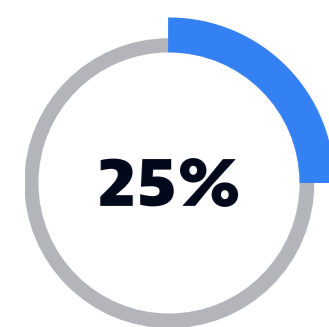
- 1 DevOps is critical to meet the rising pressure to innovate faster**
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Chapter 1:

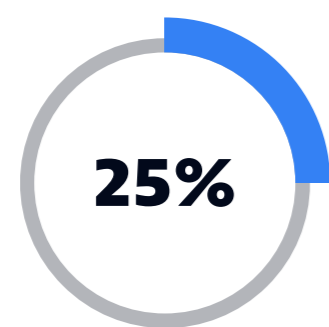
DevOps is critical to meet the rising pressure to innovate faster

Retailers 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. Retail 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.

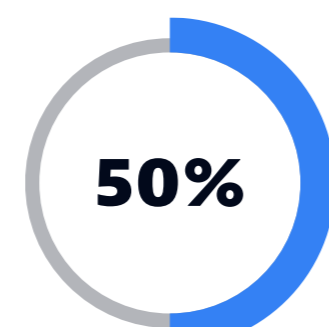
Frequency of software releases in retail organisations



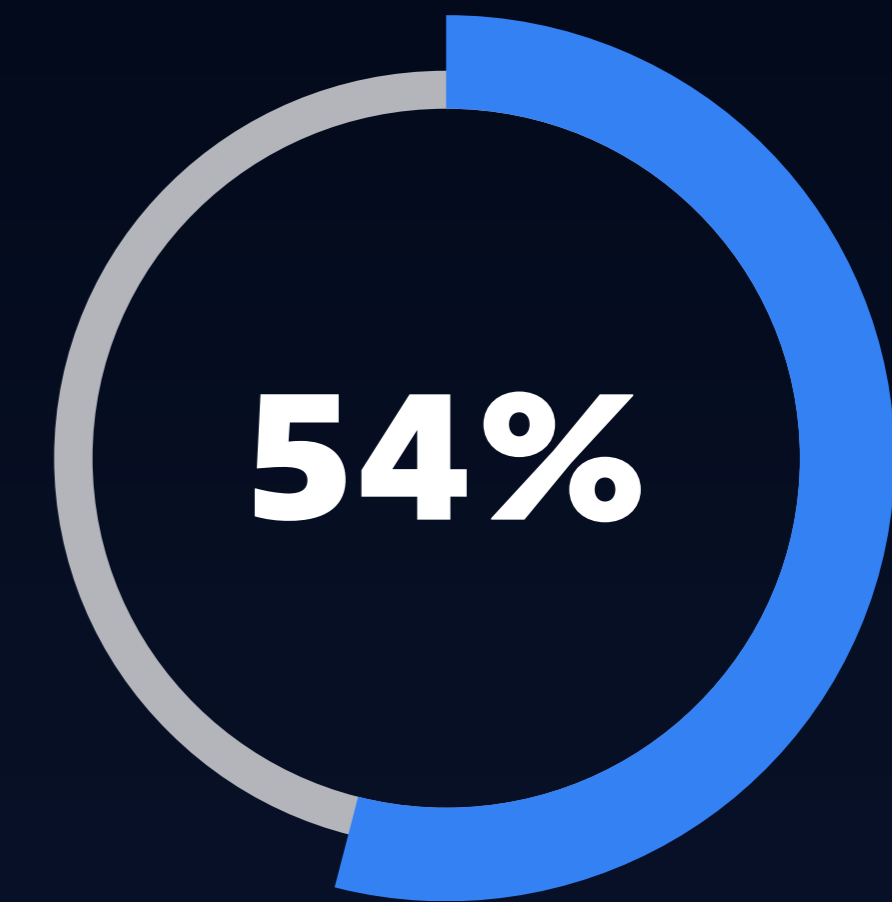
Between once per day and once per week



Between once per week and once per month



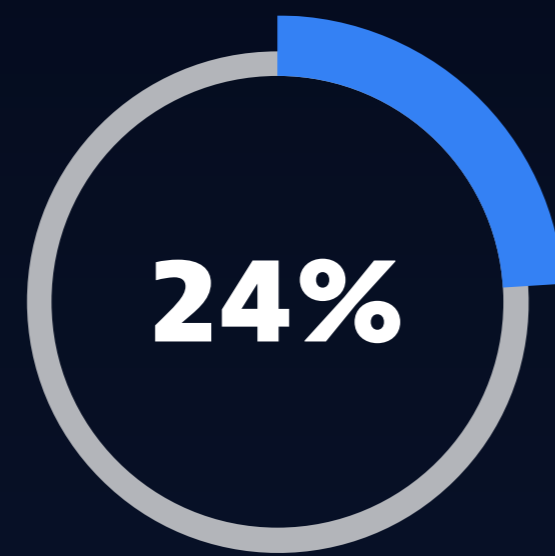
Between once per month and once per quarter



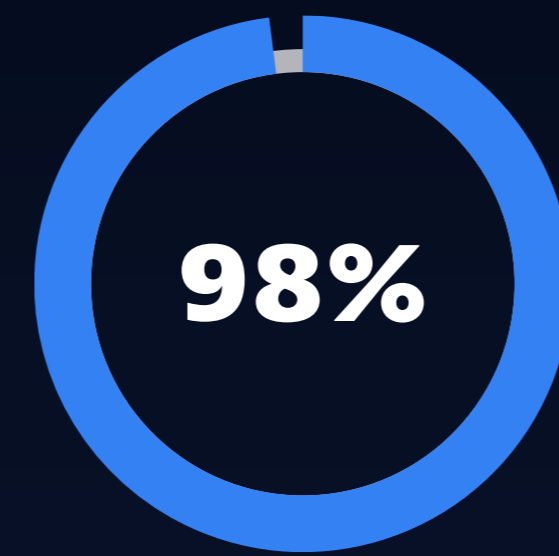
is the increase retailers expect in the frequency of software releases within the next two years

Chapter 1:

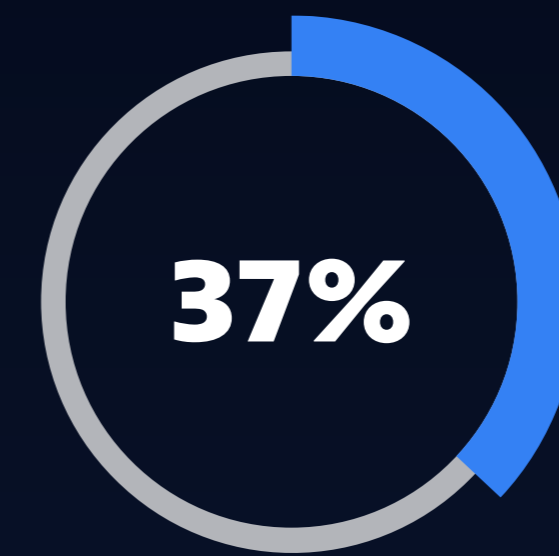
DevOps is critical to meet the rising pressure to innovate faster in retail



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



of DevOps leaders in the retail sector say extending DevOps to more applications is key for digital transformation and customer experience

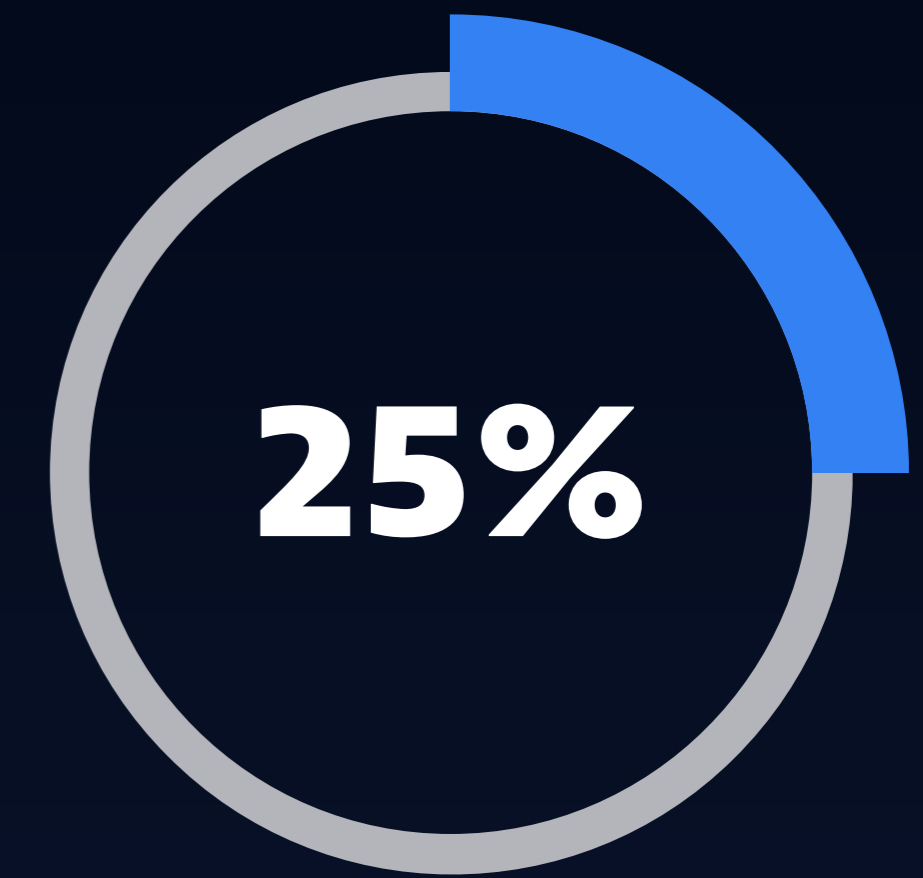


of applications in the retail sector will be fully DevOps enabled by 2023

Chapter 2:

Reducing friction for developers is critical to digital transformation in retail

Despite their continued efforts to accelerate innovation, DevOps teams 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, retailers are realising that automation across the software development lifecycle and breaking down team silos are key to meeting the demand for faster innovation.

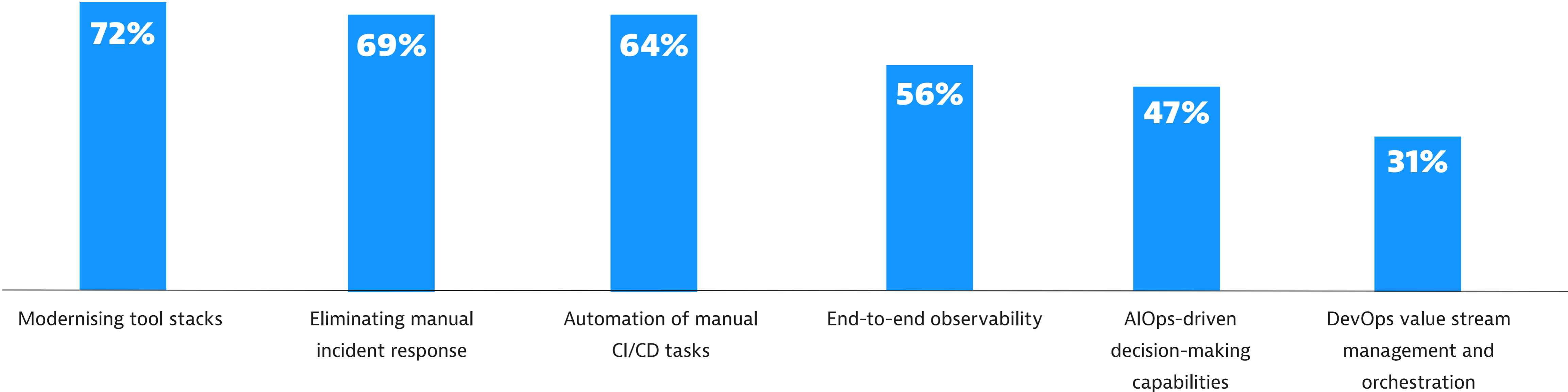


of retailers' IT and DevOps teams' time is spent on manual CI/CD tasks like detecting code quality issues - reducing time spent on innovation

Chapter 2:

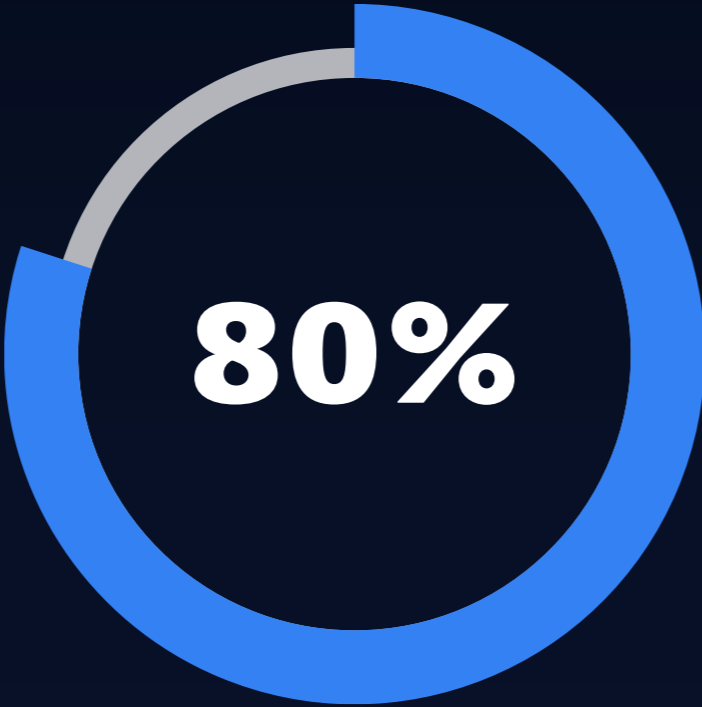
Reducing friction for developers is critical to digital transformation in retail

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

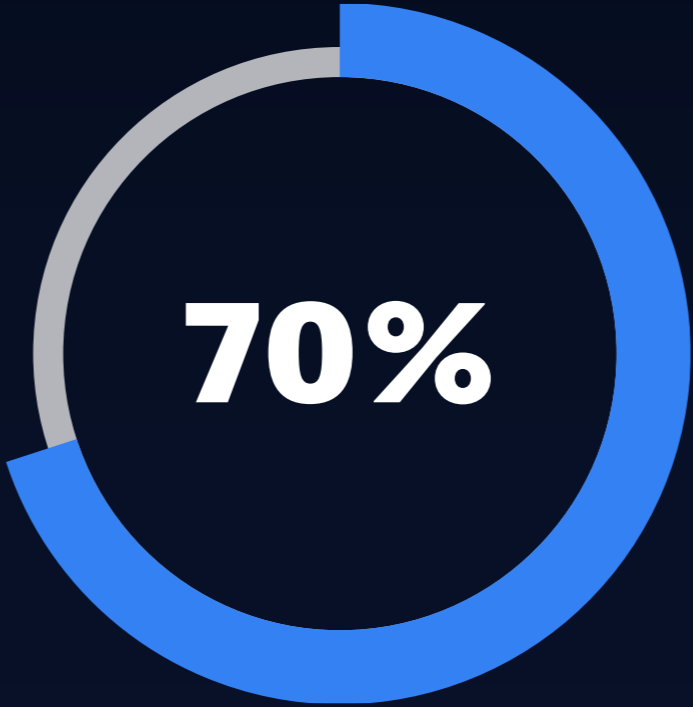


Chapter 2:

Reducing friction for developers is critical to digital transformation in retail



say siloed team culture is a barrier to DevOps success



say application complexity is a barrier to DevOps success

Chapter 3:

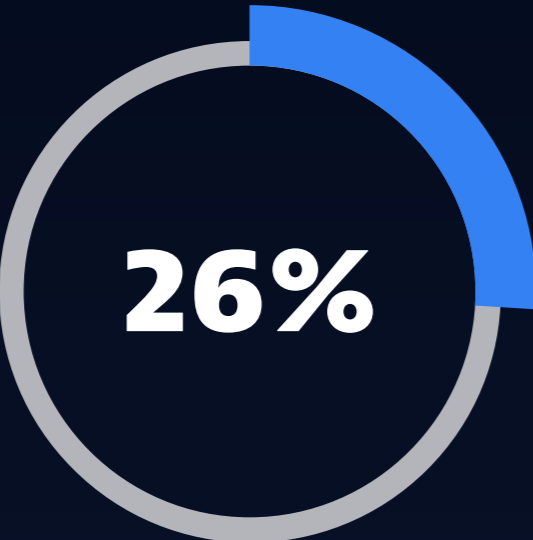
A unified toolchain is key to DevOps success

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, retailers 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.

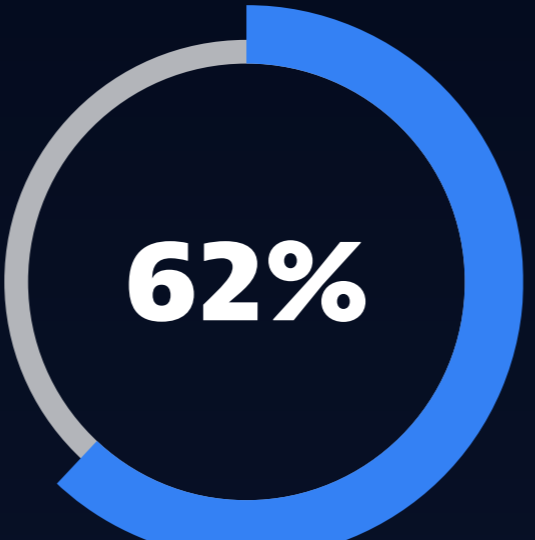


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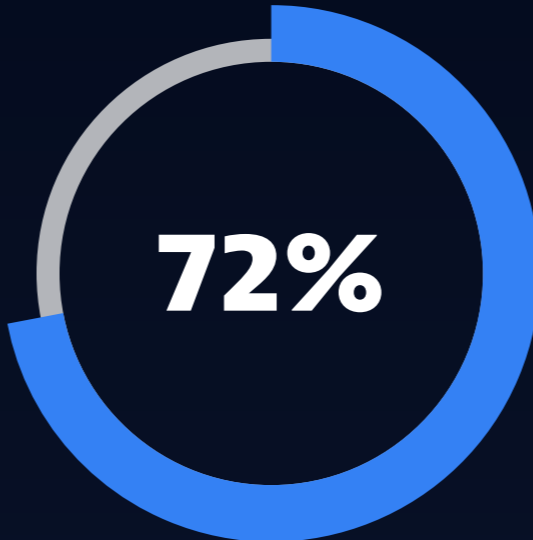
A unified toolchain is key to DevOps success



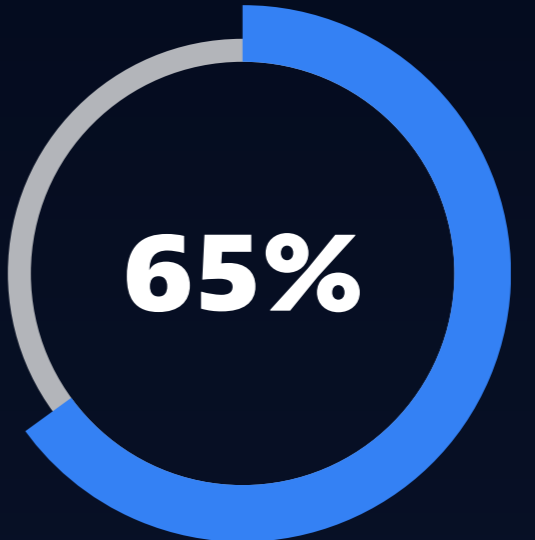
of respondents say toolchain complexity is a barrier for DevOps success



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



of respondents say modernising their tool stacks is a priority for increasing developer productivity

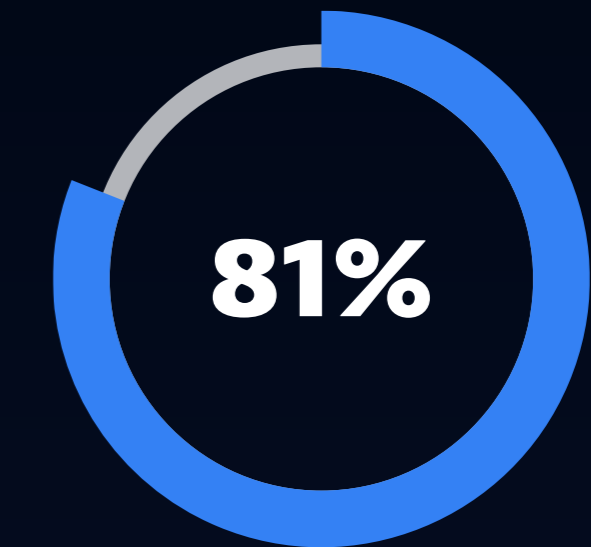


of respondents say increased automation will be essential to managing and operating their DevOps toolchains in the future

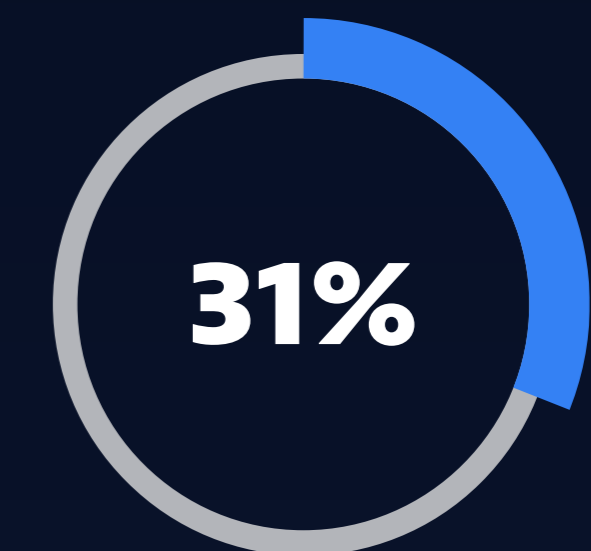
Chapter 4:

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, retail 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.



81% of respondents say extending AIOps beyond traditional use cases will play a critical role in the future success of DevOps and SRE teams

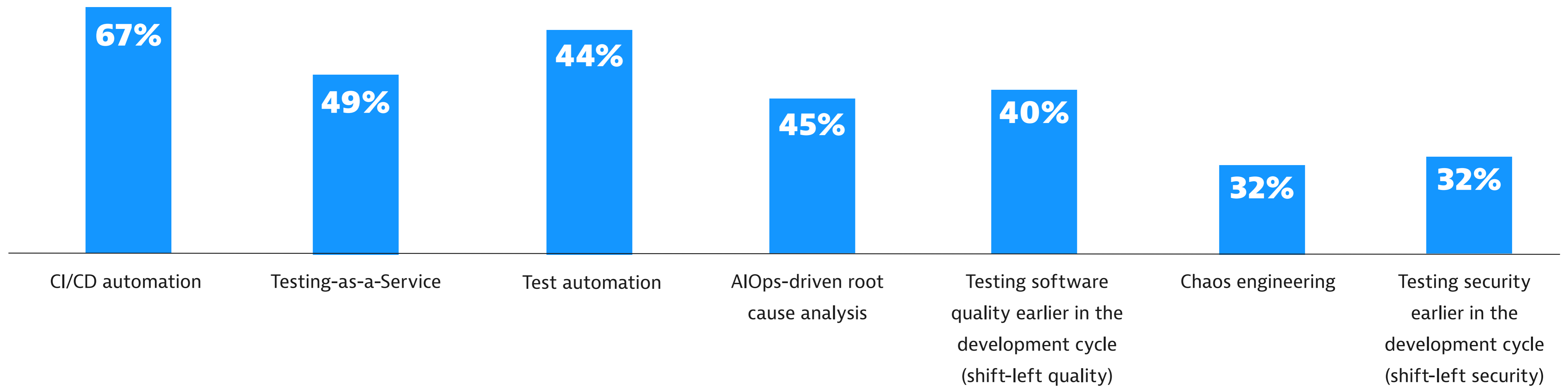


31% is the average increase in investment that retailers are set to make in automating code delivery, deployment, and remediation across DevOps pipelines by 2023

Chapter 4:

AI-augmented DevOps is essential to balancing speed and quality

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



Chapter 5:

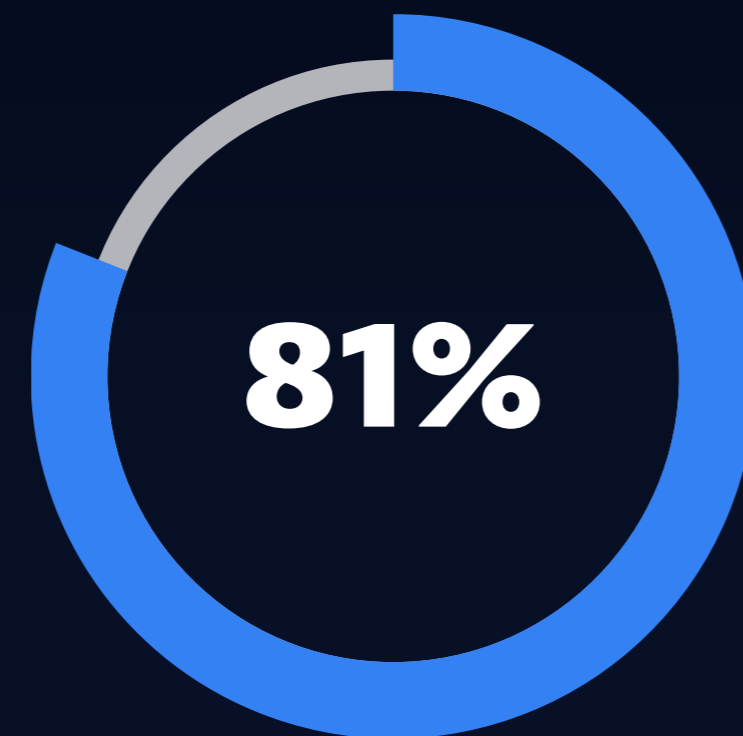
Deeper, broader observability will enable DevOps at scale in retail

Many retailers 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, retail 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.

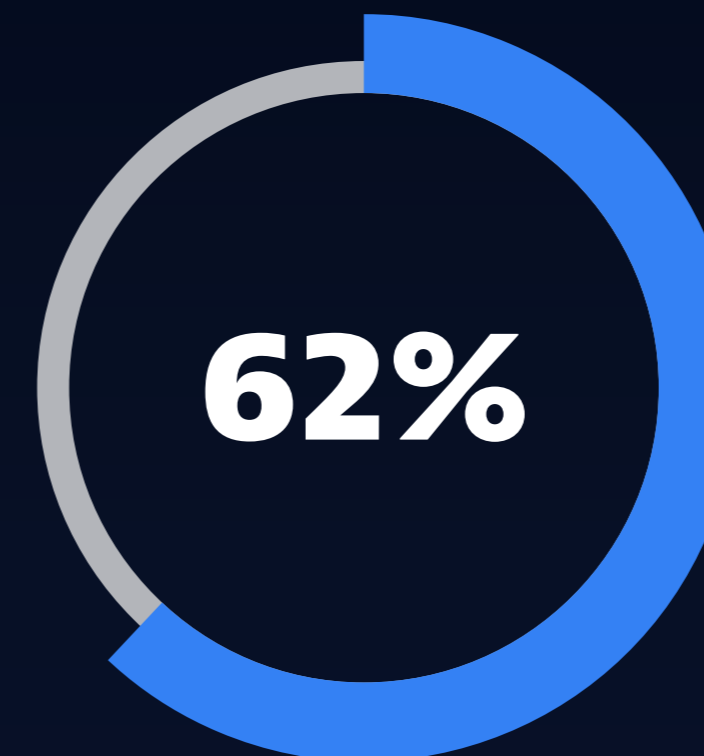


Chapter 5:

Deeper, broader observability will enable DevOps at scale in retail



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 determination.

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 multclouds

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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