



You can't manage what you can't see

Why the public sector must move
to automation & AI for cloud observability

It's time to start planning for the future

Most stories about digital transformation during the pandemic focus on private enterprise. [McKinsey](#) notes that business adoption of digital accelerated the equivalent of five years in just a few weeks. However, arguably the more impressive work has come from the public sector in the battle to contain a combined global healthcare and financial crisis. In the UK, [government departments](#) delivered 69 new digital services by the end of May 2020, with scores more in the pipeline — all while many civil servants were working from home.

This increased pace of digital delivery is likely to prove permanent. But as citizens' expectations continue to rise and more users flood online, stretched government IT teams will need to focus their efforts on observability into cloud-native environments to ensure users don't have a disappointing digital experience. It's an essential foundation for service optimisation, enhanced IT performance and improved customer outcomes. But our experience tells us there's some way still to go.

A rapid response

The UK's rapid digital response to the pandemic was no fluke. A [report](#) from the Institute for Government claims a strong talent pool, useful tooling and agile development methodologies built over the past few years were all helpful. Still, Whitehall's delivery of new digital services and

applications, and scaling up of existing ones, was impressive. They range from the HMRC's flagship Coronavirus Job Retention Scheme (CJRS) to the DWP's Universal Credit and Jobseeker's Allowance services. The CJRS was designed, built and launched in under five weeks and garnered customer satisfaction scores of over 90 per cent, according to HMRC. An [NHS app](#) saw an increase in registrations of 111 per cent from February to March 2020.

The bottom line is that once citizens are turned on to new digital ways of interacting with government, few will want to go back to the pre-pandemic norm. This is both good and bad news for public sector IT bosses. Good because it offers a tremendous opportunity to deliver public services more efficiently and cost effectively, but bad in that customer expectations are already sky-high. Continued innovation and transformation are the only way forward.

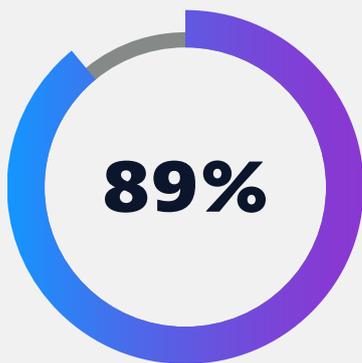
You can't manage what you can't see

This is where observability in the cloud is so important, because it is these environments that power the majority of today's digital services. It all boils down to a very simple notion: you can't manage what you can't see. It may be a simple concept, but it's a far more difficult thing to do in practice, given the complexity and size of dynamic cloud environments. We're talking about potentially thousands of digital services and millions or even

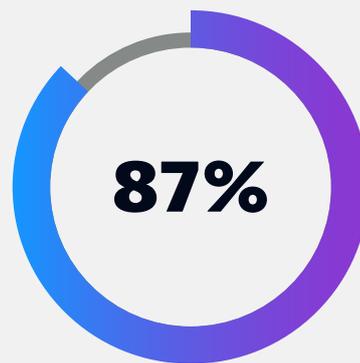
billions of dependencies that might change in milliseconds. That's a lot of data to process in real-time to identify and remediate any issues before they impact the customer. The proliferation of microservices, containers, serverless architectures and orchestration platforms only serve to compound these challenges.

Unfortunately, the average organization doesn't have visibility into its IT environment.

This became evident in our recent [survey](#) of 700 global enterprise and public sector CIOs:



said they **do not have** full observability into their **application and infrastructure environments.**



said they **do not have** end-to-end observability into **application and website user experience.**

Time to automate

Part of the problem here is scale. The sheer volume of data can be overwhelming for many, which makes it almost impossible to drive the critical insight needed to deliver world-class customer experiences. Manual instrumentation efforts of tools are too often piecemeal, time-consuming and ineffective. Blind spots start to appear, which perpetuate organisational siloes and further impact digital service delivery. Around half (49 per cent) of those global CIOs say they have limited visibility into how digital services are performing from a user perspective. The same number say IT and business teams work in siloes.

This is why organisations are increasingly turning to AI and automation to achieve end-to-end IT observability at scale. These efforts must begin with automatically discovering and mapping all the components and dependencies of your technology stack—from the underlying infrastructure to networks, hosts, processes, services, apps and websites. Next, AI tools can go to work learning what 'normal' looks like, determining whether a problem is likely to impact users, and then performing root-cause analysis to help you understand what went wrong. These same insights could in time be used to optimise digital experiences, automate cloud operations and free up the time of developers to focus on value creation rather than routine tasks.

The benefits of automation:



Digital experience optimization



Cloud operations automation



Innovation vs. routine tasks

A digital future

Just as the 2008 financial crash spurred a new wave of digital innovation in government, so the pandemic has the potential to do the same in 2021. Given the hit to national GDP over the past year, the focus will once again be on streamlining processes and driving cost efficiencies. But if these new digital public services don't first meet user expectations, then all bets are off.

This is where automated, AI-powered intelligence is needed to extend observability in the cloud—removing blind spots, supporting rapid resolution of problems, and delivering delightful user experiences. More than two-thirds of CIOs recognise the need for a radically different approach to observability. It's time to start planning for the future.



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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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