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9 Facts That Will Make You Rethink Application Performance Monitoring

Consider these nine data points as you take steps to optimize the digital experience for your users.

FACT #1

Only 5% of business applications are currently monitored by APM. Cost, scale, SaaS, and thick client/legacy architectures are some of the prohibitive factors impacting wider adoption. To complement APM, many companies are starting to adopt Digital Experience Management (DEM) to monitor applications at the point of consumption — the end user's device.

FACT #2

It's a digital world — and the mix of technologies continues to grow. Companies are making it their No. 1 priority to adopt a full mix of digital technologies — from mobile apps to microservices and containerized architectures — to enable more agility, innovation, and end-user focus than ever before.

95% of CIOs expect their jobs to change or be remixed due to digitalization.[1]

FACT #3

You'll have to monitor what you don't control. Whether you are delivering the service or whether it depends on a third party, your users (customers, partners, employees) will hold you accountable for the end-to-end experience. That's why visibility into Web Services and other third-party API calls, as well as IaaS, PaaS, and SaaS, is critical.

Cloud adoption continues to grow in all its forms:

68% of IT organizations are running hybrid transactions that span on-premise and public cloud applications.[2] And public cloud traffic accounts for over 45% of overall network traffic.[3]

FACT #4

Enterprise application environments are more complex than you think. In large enterprises, there can be tens of thousands of distributed application components — and a single transaction may traverse over a thousand nodes.

Larger companies are leading the adoption of Docker: According to a recent report, **60%** of organizations with 500 hosts or more are running Docker, and overall adoption is up by **40%** in one year.[4]

In another survey, **86%** of respondents said they expect microservices to be the default architecture within five years.[5]

FACT #5

Transience magnifies complexity. In addition, the ephemeral and elastic nature of containerized applications in the cloud produces state changes in the blink of an eye.

Container and application orchestration (with K8s, Amazon ECS, Pivotal, etc.) is especially popular among teams adopting DevOps practices.

FACT #6

APM generates petabytes of data a day. In terms of volume, velocity, and variety, APM has a rather big... Big Data problem. A large credit card processing company can execute upwards of a billion application transactions a day, generating petabytes of data for processing and storage — *every single day.*

FACT #7

Scale and data quality are inextricably linked — or are they? Companies are sacrificing data quality by sampling transactions and capturing only patchy details, leaving large blind spots with regards to the completeness of the data set. This doesn't have to be the case. The time is ripe for Big Data APM.

FACT #8

High definition is not just for your picture quality. Digital transactions are expected to execute in a matter of seconds. In a world where a revenue-impacting transaction taking a mere five seconds is already considered critical, your APM data needs to be just as high-res. Environmental metrics sampled at more than one-minute intervals are okay for infrastructure monitoring, but for troubleshooting transactions, you need second-by-second visibility.

FACT #9

APM has a quantifiable bottom-line impact. Our customer study showed a 5x return on investment over three years calculated for companies with large Riverbed SteelCentral APM deployments.

About Riverbed SteelCentral

Riverbed SteelCentral provides the first unified Application Performance Management (APM) solution that monitors the digital experience of every type of app in the enterprise portfolio from the point of consumption (the user's device), maintains the highest level of data quality at any scale, and upgrades APM to a big data practice. SteelCentral APM blends end-user experience, application, and infrastructure monitoring to provide end-to-end visibility into the user's digital experience and ensures the reliability of business-critical applications, on and off the cloud.

Learn more >>>

Sources

[1] Gartner, Press Release, "Gartner Survey of More Than 3,000 CIOs Confirms the Changing Role of the Chief Information Officer," October 2, 2017

[2] EMA, *Ensuring Application Performance Across Hybrid Environments*, August 2016

[3] EMA, *Network Management Megatrends 2018*, April 24, 2018

[4] Datadog, "8 Surprising Facts About Real Docker Adoption," April 2017

[5] Lightstep, Press Release, "New Research Reveals Record Growth in Microservices Is Disrupting the Operational Landscape," May 2, 2018