

riverbed®

Covering Your SaaS

How to manage the end-user
experience of application
environments you don't fully control

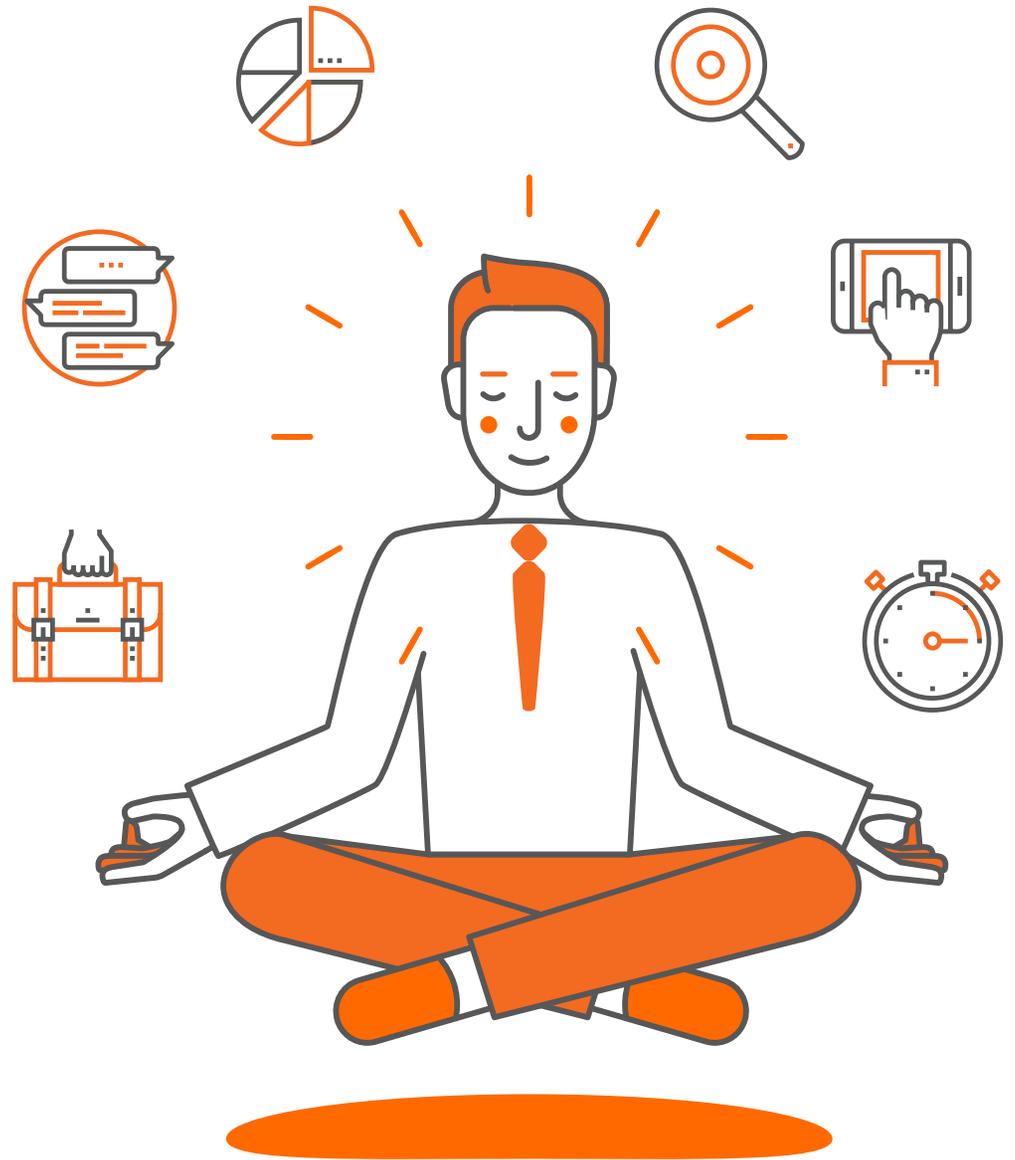


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SaaS—The New Way to Do Business

Businesses are adopting Software-as-a-Service (SaaS) applications at a rapid rate, attracted by benefits such as reducing CapEx, offloading administrative burdens from IT, and improving employee productivity and collaboration. Over the last five years, SaaS spending has increased across companies of all sizes and in all markets. In 2018, companies spent more per employee on SaaS applications than they did on new laptops.ⁱ

While the benefits of SaaS are numerous and proven, the model comes with inherent risks to the end-user experience and new challenges for IT. Traditional IT monitoring solutions are ill-equipped to handle SaaS solutions, leaving IT with inadequate troubleshooting tools and inefficient processes for determining the root cause of performance bottlenecks and user-impacting issues.

Riding the wave of SaaS adoption

The average company spent

\$343,000

on SaaS in 2018, a 78% increase from the previous year.ⁱⁱ

By 2020, nearly three quarters of companies will have moved

80%

of their apps to SaaS delivery.ⁱⁱⁱ

80%

of end users prefer SaaS—or cloud-hosted apps for communication or organization purposes.^{iv}

The average employee uses

8 SaaS

applications.^v



Flying Blind and Feeling Out of Control

Central to the challenges of SaaS management is a loss of control over the hosting infrastructure. When performance issues arise, the help desk or application teams no longer have direct access to the resources they need to troubleshoot, and corporate IT can no longer instrument the back-end components with traditional performance monitoring tools.

What happens when a SaaS application fails?



The scenario:

A prominent SaaS app used by a Fortune 100 company slows to a crawl, and users are barely able to log in, much less complete any work.



The result:

Thousands of users are affected and workforce productivity is impacted.



From IT's perspective:

The IT help desk is inundated with calls from around the globe as teams scramble to determine the root cause. Not one single IT monitoring tool shows a hint of a problem, and the SaaS provider says everything appears to be fine on their end. IT finds no workaround, and for 24 hours, users have two choices: sit and do nothing which wastes money and time, or resort to using their own apps, exposing the company to potential security risks. It's a massive blow to IT's reputation, and the business loses out on potential customers, too.

Even if the application itself is running without issue from the vendor's perspective, performance is still highly dependent on the network that delivers it to end users. However, most SaaS apps are directed over the public internet—a "best-effort" service that doesn't come with the same performance guarantees as private networks. These internet connections are also outside of IT's direct line of sight, creating another layer of complexity when trying to ensure a satisfactory user experience for SaaS applications.



Top 5 Places You Lose Visibility with SaaS Adoption

Investigating a service degradation in a SaaS environment can leave IT scratching their heads as they try to pinpoint bottlenecks. Here are five places where IT used to have tighter visibility or control, but no longer do in a SaaS environment:



- 1. Application Code**
SaaS application code can no longer be instrumented directly by IT to provide real-time monitoring.



- 2. Data Storage**
Slow data transmissions cause poor application performance, but with SaaS apps, you give up control over where and how your data is stored.



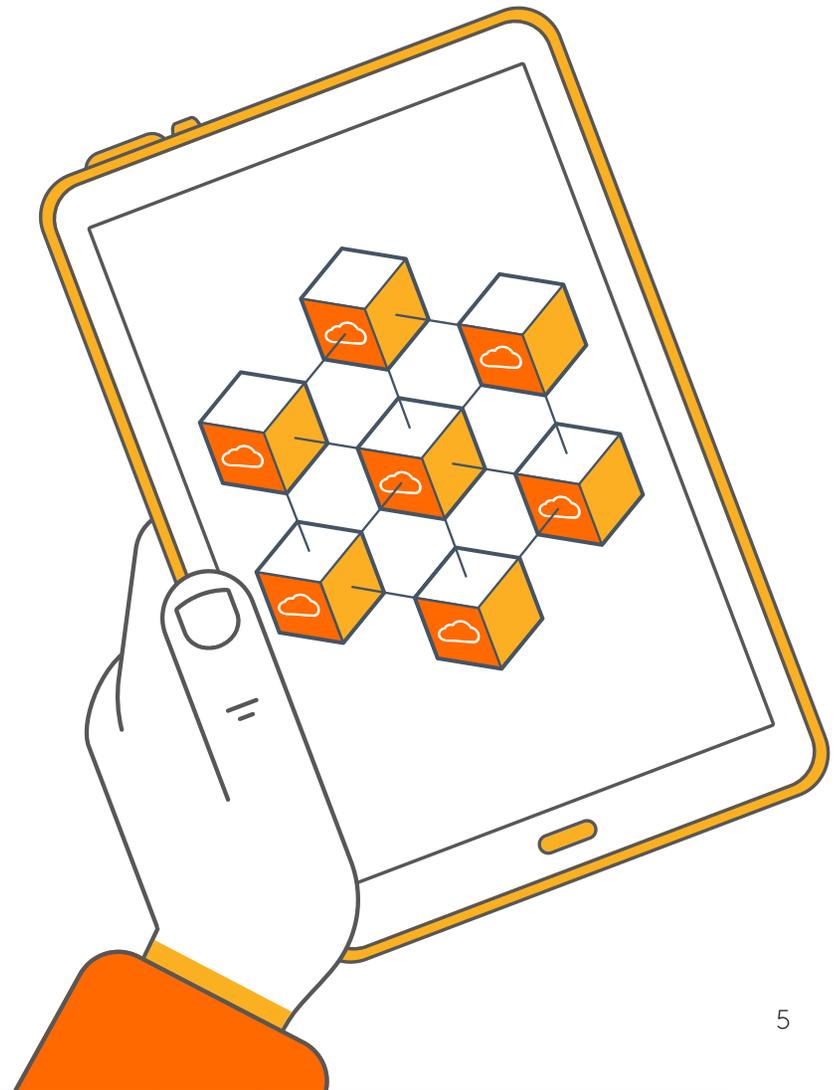
- 3. Infrastructure Components**
SaaS apps are often heavily abstracted and distributed, making it difficult for IT to track issues outside the corporate environment.



- 4. Network**
SaaS apps are usually delivered over the internet—a “best-effort” service that is outside of IT’s control.



- 5. Upgrades and New Capabilities**
SaaS apps are updated constantly and while this innovation can help drive workforce productivity and customer satisfaction, it can also lead to unintended consequences such as slow performance and broken integrations.



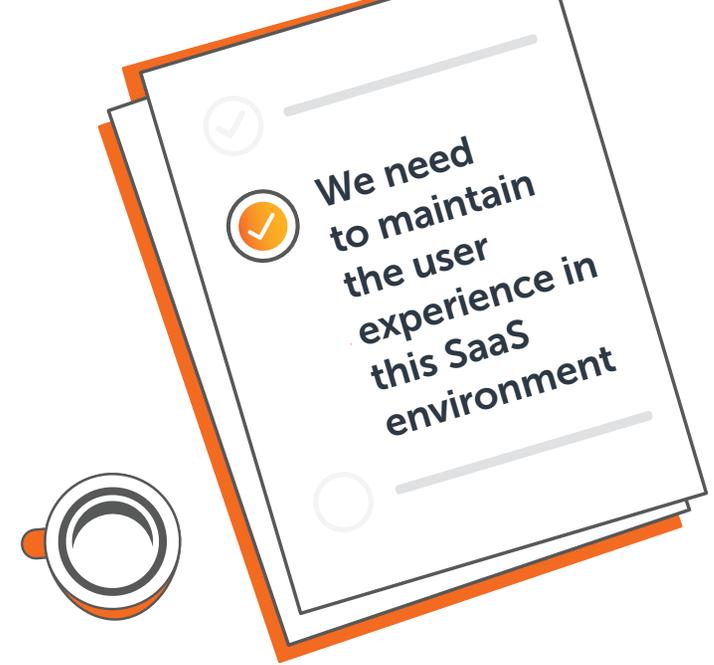
Your Vendor's SLAs Can't Recover Lost Business

While it's true that SaaS vendors provide SLAs for service uptime and availability, these guarantees only go so far. SLAs, even in the 99.9% range, still equate to 40+ minutes of monthly downtime, they're subject to coverage exclusions, and many even exclude scheduled maintenance.

More importantly, availability is only part of the equation for business productivity. IT is on the hook for end-to-end performance, and vendor SLAs don't guarantee that SaaS apps will deliver an adequate experience from the user's perspective. While the SaaS vendor incurs financial penalties if availability thresholds are not met, that doesn't help you recover lost revenue, productivity, or damage to your company's reputation that could result from prolonged outages or periods of slow performance.

When your end users experience a service degradation, a SaaS vendor may respond that their dashboards are "all green." It then becomes the burden of IT to troubleshoot, find the root cause, and fix performance issues before they impact business outcomes—all while lacking visibility into a SaaS vendor's systems and code.

It's important to supply IT with the right tools that facilitate a constructive, data-driven dialogue with SaaS vendors to accelerate mean time to resolution.



SaaS Vendor SLAs Only Provide Partial Coverage

When it comes to application access and performance, SaaS vendor SLAs only provide partial coverage. Your IT team is on the hook for what's left.

What's covered

- Software availability and uptime
- Mean time to respond/repair based on severity level

What's not

- Network performance (outside of their environment)
- Internet service
- Wi-Fi speeds
- Integration points
- End-user devices (laptops, tablets, smartphones, etc.)
- Compatibility issues
- Actual end-user experience

Users: Your Most Expensive Monitoring Tool

Why don't users just contact the service desk when there's a problem?!

Today's users have ever-increasing expectations of how fast applications should load and run.

This expectation only becomes heightened in a cloud environment—50% of business users expect apps to perform better once in the cloud.^{vi}

But when a user reports a problem, it's difficult for end-user service or help desk teams to diagnose and resolve it. They frequently lack context—what was the user doing when he or she experienced the issue?

As a first course of action, many teams still rely on remote desktop access, which is invasive and further impacts end-user productivity. Even then, the problem is often escalated to other internal teams or to the SaaS vendor for further diagnostics and troubleshooting, creating a lot of finger-pointing and leaving the end user wondering when they will get a resolution for their issue. Often, modern users circumvent the process entirely and attempt to find workarounds for poorly-performing SaaS apps, which can lead to a significant drop in productivity.

Top 5 places your employees look for answers before contacting the help desk:



1. An internet search engine

Before even asking a neighbor, your digital employee will Google for answers.



2. Their nearest coworker

If their web search comes up empty, they might be inclined to ask over the cube wall.



3. Social media

Facebook and LinkedIn are common gripe and troubleshooting platforms, which can lead to negative perceptions of your company by a wide audience.



4. Their own past experience

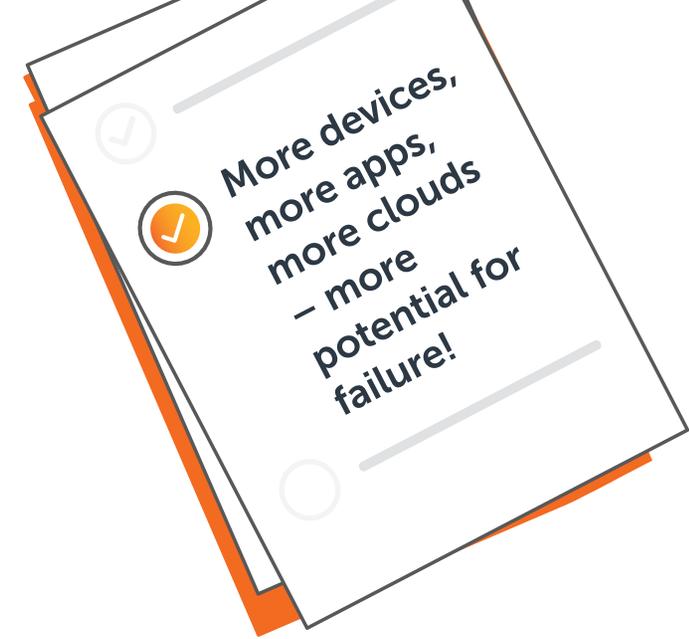
They'll try rebooting, turning apps on and off, running virus scanners, etc.



5. The manufacturer's or software vendor's website

If all else fails, they might see what they can find directly from the source.

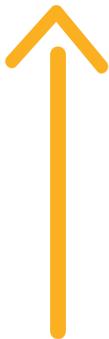
Leaving Users to Their Own Devices (and Apps)



To foster improved workplace productivity, many businesses now have bring-your-own-device (BYOD) policies so employees can complete work on any device of their choosing. So when employees report performance issues regarding SaaS applications, IT often has more complexity from the start. Isolating the root cause requires sifting through device, browser, or operating system and application versions to rule out incompatibilities.

The ups and downs of BYOD

UPs



Employee Satisfaction

61% of Gen Y and 50% of workers over the age of 30 believe the tech tools they use in their personal lives are more effective than those used in their work life.^{vii}

Cost Savings

Companies favoring BYOD realize an annual savings of \$350 per employee, per year.^{viii}

Increased Productivity

Using portable devices for work tasks saves employees 58 minutes per day while increasing productivity by 34%.^{ix}



DOWNs

Breach Potential

When an employee loses their personal device, they could lose company data and expose application access to unauthorized users.

Complicated Monitoring

BYOD complicates monitoring by mixing personal and business applications and data on the same device.

Proliferation of Devices

The increase in endpoints can introduce complexity and reduce visibility across the entire IT landscape.

In addition, users often procure and leverage SaaS apps without IT knowing. Not only does the resulting shadow IT phenomenon subject the business to added security and data loss risks, but it also increases the complexity of the IT environment and hampers troubleshooting. Even with a supported applications policy in place, the IT service desk may find themselves investigating problems for non-IT-sanctioned applications.

Lastly, pervasive use of personal applications may cause poor end-user experiences for other employees or customers. One study indicated that employees spend over 2.5 hours per day on social media sites including Facebook and YouTube.^x Such volumes of purely recreational traffic contend for network bandwidth and other finite resources, meaning performance for business-critical apps may suffer.

Validating the Impact of SaaS Apps with End-user Experience Monitoring



The business wants performance metrics that IT can't currently provide



Even if an IT organization feels they are adequately managing the challenges of delivering SaaS applications, determining the realized value of those apps is vital to the health of the organization. Traditional uptime and availability metrics are useful for IT because they help capture the health of IT services. However, they're not as useful to executives or application owners because they don't correlate to impacts on user productivity, company financials, or other key business performance metrics.

Uptime and availability metrics don't highlight how well certain features are being adopted, nor can they illustrate how a user's interactions with an application aid or impede their ability to complete business activities.

Four steps to validate the business impact of SaaS apps:^{xi}



1. **Monitor IT from the point of consumption** to gain a firm understanding of the end-user experience of every type of application—local, cloud, web, or mobile



2. **Use business activity analytics to measure what matters**—the response time that users see as they interact with applications in the course of doing their jobs



3. **Set a baseline of reasonable end user service levels** based on real-time performance analytics



4. **Monitor every user interaction with business-critical applications on every type of device** to determine what the user is actually experiencing and provide application context for issue resolution

Take Back Control of SaaS Applications with Riverbed

Riverbed puts corporate IT back in control with an end-user experience monitoring solution that analyzes the experience of every enterprise SaaS app in a company's portfolio, running on any physical, virtual, or mobile device.

With Riverbed, IT can monitor the performance of any application in your enterprise from where it matters most—the point of consumption.

Unlike other technologies that only emulate or estimate what the end user sees, Riverbed's solution provides accurate information about how end users actually experience and interact with their applications and devices. This helps IT rapidly diagnose and resolve end-user issues—improving customer satisfaction and optimizing the productivity of today's tech-dependent workforces.



Riverbed End-user Experience Monitoring



Monitor the user experience across every app and device in your portfolio



Understand the end-user experience from the point of app consumption to proactively respond to issues



Break down sources of delay by device, network, and app back-end to streamline troubleshooting and issue resolution



Identify when issues are on the SaaS provider's end and have data-driven exchanges to resolve issues faster



Assess the business impact of adopting SaaS applications as well as other application, infrastructure, or device changes by comparing workforce productivity before and afterward

Riverbed Elevates the End-user Experience and Transforms the Enterprise

Track SaaS adoption and performance

Monitor SaaS apps deployed across the enterprise and understand usage to right-size licensing costs. This includes the ability to track the usage of common shadow IT apps. Automatically establish a baseline for application health and understand how deviations from that baseline impact enterprise-wide productivity.

Assess the business impact of SaaS apps

Prove new SaaS apps are delivering their intended value by evaluating business activities before and after adoption. For example, compare changes to application response time between the legacy app and SaaS version to highlight impacts on user productivity.

Quickly identify when issues are with the SaaS vendor

Proactive notification of issues that impact end-user experience— isolated down to the source of delay (device, network, or app backend)—provides IT with the data to facilitate a constructive dialogue when problems exist within an SaaS vendor's infrastructure. Once the problem is reported as fixed, IT can quickly validate the impact of that change by comparing application activities before and after the fact.



Getting Started with Riverbed

Riverbed provides the only end-user experience monitoring solution that correlates device health, application performance, and user behavior to improve workforce productivity and user satisfaction. As part of a complete digital experience management solution, Riverbed end-user experience monitoring helps your enterprise deliver on digital transformation initiatives by providing a clearer view of your SaaS apps and the impact they have on your business.

For more information, please [visit our website](#). Or, if you want to start your free trial, visit our [Guided Tour](#).

ⁱ <https://www.blissfully.com/saas-trends/2019-annual/>

ⁱⁱ <https://www.blissfully.com/saas-trends/2019-annual/>

ⁱⁱⁱ <https://financesonline.com/2018-saas-industry-market-report-key-global-trends-growth-forecasts/>

^{iv} <https://financesonline.com/2018-saas-industry-market-report-key-global-trends-growth-forecasts/>

^v <https://www.blissfully.com/saas-trends/2019-annual/>

^{vi} Network Management Megatrends 2018, EMA, April 2018

^{vii} <https://www.forbes.com/sites/lilachbullock/2019/01/21/the-future-of-byod-statistics-predictions-and-best-practices-to-prep-for-the-future/#be9d0af1f307>

^{viii} <https://www.forbes.com/sites/lilachbullock/2019/01/21/the-future-of-byod-statistics-predictions-and-best-practices-to-prep-for-the-future/#be9d0af1f307>

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^x <https://www.entrepreneur.com/article/314292xi> https://www.riverbed.com/blogs/business-process-slas.html?utm_source=blog&utm_medium=social&utm_campaign=steelcentral