

Managing seasonal scale in Retail

Optimize revenue and customer
experiences with robust
performance testing



Designated shopping holidays, such as Black Friday, Singles Day, Prime Day, and Cyber Monday, are the backbone of online retail—driving big sales spurred by spikes in bigger online traffic. Just how big? Holiday sales see retail web traffic surge more than three times that of a normal day.¹

These traffic spikes create huge revenue opportunities, but also put retailers at risk for website crashes and slowdowns. This paper explores how a comprehensive performance engineering strategy, with intelligent performance and load testing, can help retailers seamlessly scale for peak and seasonal sales.

Industry backdrop

With seasonal spikes in online shopping often come slowdowns and website crashes, with retailers facing costly failures in their ecommerce infrastructure. The moment website performance and responsiveness degrade, customers often abandon their sessions and carts for other options—and may not return. Plus, infrastructure issues among retailers often become public, damaging the reputation of the business and further shaking customer confidence.

Delivering anything less than a high-performing online retail experience hurts the business due to:

- **Customer churn**

57 percent of users expect a site to load in three seconds or less and 88 percent of users don't return to a website after a bad experience.²

- **Mobile app frustration**

85 percent of users think a company's mobile app should be better than their desktop site.³

- **Unexpected operational costs**

40 percent of organizations indicate a single hour of downtime costs between one and five million dollars.⁴

¹ Quantum Metric, "2022 Holiday Habits: Black Friday + Cyber Monday." (2022)

² TrueList, [UX Statistics](#). (2023)

³ Northern Arizona University, [User Experience Statistics](#)

⁴ ITIC, "Forty Percent of Enterprises Say Hourly Downtime Costs Top \$1 Million." (2020)

“Last year’s Black Friday promotion **was an enormous success for Discount Tire**. We saw almost two-times higher user traffic compared to the previous season, but **our systems remained rock solid**—helping us to delight our online customers and **win incremental sales**.”

Deexith Thota, Senior Performance Engineer, Discount Tire



The role of proactive performance engineering

When the biggest shopping days of the year arrive, retailers hope digital performance will deliver as expected. As traffic climbs and systems begin to buckle, there's little that can be done in the moment. Preparation, in the form of performance engineering and testing, is what's needed to fully support both expected and unexpected peaks in volume.

As the software development phase for web applications nears completion, there's one test that's essential to understanding the readiness for deployment: load testing. This type of performance testing allows retailers to determine how web applications will behave during normal and peak load conditions, as well as their breaking point (should it occur below the peak load condition). At its core, load testing is used to confirm that the web application meets intended performance goals or objectives, which are frequently identified in a service level agreement (SLA).

Because more consumers than ever are relying on web applications to access products or services, load testing is needed to validate that an application will function properly during realistic load scenarios. Not only does load testing mitigate the risk of software failures, it also mitigates the risk of users becoming frustrated with application downtime and abandoning the app altogether—which could affect sales and the bottom line.

Deliver high-performance applications that delight and engage

On Black Friday in 2022, consumers spent a record \$9.12 billion on online shopping—up 2.3 percent from the previous year.⁵ US retail sales are expected to continue to grow, reaching \$1.7 trillion by 2027.⁶ Global ecommerce is thriving as well, with Singles Day, the annual Chinese shopping extravaganza, securing 900 million shoppers in the first two weeks of November 2021—surpassing the 180 million Black Friday shoppers in 2022.⁷

To capture consumers' attention and loyalty, online retailers must plan for the big events on the calendar and other high traffic days with a robust performance testing strategy.

To meet customer expectations, it's not enough for a mobile app to work, it must consistently perform as expected on every platform, device, and network. Therefore, performance engineering teams must harness the speed of change and release software faster while delivering a superior end-user experience. It's crucial to engineer quality testing earlier in the software development lifecycle by building more realistic tests and enabling increased collaboration across performance teams.

With a proactive, continuous performance engineering discipline that expands performance testing to new roles, tightly integrates into the CI/CD process (continuous integration, delivery, and deployment), monitors performance end-to-end, and facilitates continuous improvement, retailers can ensure that teams can engineer performance early in the lifecycle through the end-user experience.

⁵ USA Today, "9.12 billion spent in a day." (2022)

⁶ Insider Intelligence, "US retail ecommerce sales will see increasing growth through 2027." (2023)

⁷ Harvard Business Review, "In China, a Singles Day Strategy Must Run Deeper Than Discounts." (2022)

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LoadRunner Enterprise was the only solution on the market that could cater to our technical requirements—and even though we’ve evaluated other solutions since, **LoadRunner Enterprise remains the clear leader.**”

Aditya Kattamuri, Assistant Manager, ITSM Test & Quality Assurance, Discount Tire

Performance engineering outperforms traditional performance testing, which most regard as an addendum to the QA process. Implementing a performance engineering program enables unmatched, seamless collaboration among teams and enhances tools and processes.

The ability to seamlessly scale digital services during high load periods is critical to retail success. Improvements in seasonal scaling can provide significant benefits to the average retailer including:



Revenue optimization

Commerce solutions scale seamlessly, minimizing abandoned sessions and failed transactions.



Customer experience

Customers benefit from exceptional omnichannel shopping experiences.



Brand loyalty

Happy customers become brand advocates and return shoppers.



Seamless omnichannel experiences

Great experiences require strong performance across multiple enterprise solutions, including demand, supply, and logistics.



Growth and expansion

Superior digital retail experiences make growth easier through expanded product and service offerings to a loyal customer base

Why OpenText?

Online retailers must plan for the big events they know about and prepare for those they don't. A robust performance testing strategy backed by enterprise-grade performance engineering solutions can help ensure your online retail site is available and performing well.





The OpenText performance testing platform allows you to confidently test complex load, stress, and performance scenarios across legacy, website, and mobile applications. By ensuring tools are right-sized for different users, exploiting test reuse, and managing or delivering shared infrastructure, the platform helps you develop a performance engineering ecosystem for success.

- Test quicker and identify problems faster through root cause analysis.
- Save testing money and time without additional infrastructure.
- Reduce hardware maintenance with a flexible testing model.
- Optimize application performance before deployment.

By using OpenText solutions, your organization can develop a performance engineering methodology to meet peak and seasonal retail spikes with confidence.

Next steps

Together, we can outline a vision and identify opportunities to improve application and infrastructure performance and address seasonal scale challenges. Below are suggested next steps to ensure your systems seamlessly manage peak volumes to delight customers and keep them coming back for more.



Introductory meeting

Bring together your OpenText Global Account Director or Senior Account Representative with your organization's Account Business Unit President, COO, CTO, or decision maker on IT infrastructure investments.



Joint roadmap exchange

Hold a day-long information exchange between operational leaders (directors and above) and OpenText to gather insight into your digital operations and scalability challenges, development, operations and data flow initiatives, current approaches, and obstacles.



Business Value Consulting workshop

Engage the OpenText Business Value Consulting team to assess the current state of operations during peak demand periods and define a vision and roadmap to optimize performance throughout the system development lifecycle with an effective seasonal scale strategy.



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