

A black gift box with a teal ribbon bow is positioned on the right side of the image, resting on a dark wooden surface. The box is wrapped in black paper with a fine, vertical ribbed texture. A teal-colored ribbon is tied around the box in a decorative bow. The background is a dark, textured wooden surface with visible grain patterns.

CASE STUDY

HOW AN ONLINE MARKETPLACE ENSURED
BLACK FRIDAY SUCCESS

INTRODUCTION

Our client has worked hard to establish themselves as a great brand. Protecting this was vital ahead of their 2020 peak trading period.

They are renowned for their excellent customer service and commitment to suppliers. This all rests on their world-class technology solution, but could it cope with the 'new normal'? Could they live up to their own high standards, even with COVID-19, lockdowns, and peak surges? In short, yes.

With the help of Spike95, our client gained invaluable performance insights. This information built confidence in their systems ahead of peak trading. They went on to smash their targets with a robust platform, ready for future sales surges.

LOCKDOWNS: AMAZING OPPORTUNITIES AND UNIQUE CHALLENGES

In 2019, our client coped with Black Friday, making it through their peak trading period with only a few nervous moments. Even with normal growth, they always knew 2020 would be more demanding.

Then COVID-19 hit, suddenly they faced a much bigger challenge - national lockdowns and a surge in online shopping. Due to their position and offerings, they were at the forefront of a changing world - Gifting-as-a-Service.

Their business model had to evolve. Not only were they providing a channel for customers to find their perfect suppliers and giving people a chance to connect with each other - this all drove their nervousness higher.

Increased site visitors and personalised gifting was great in theory, but would they cope? How far could their infrastructure stretch? When would their systems go pop? There were too many unknowns and they couldn't let their partners down.

THE RISK OF FAILURE WAS TOO BIG TO IGNORE

Our client had already seen their customer volumes grow over 2020. They knew that Black Friday would put immense pressure on their systems and any downtime would hit them hard. This is their most crucial time and even small issues could leave devastating results:

- **Downtime would cost £250k per hour**
- **Failure would shred their hard-earned reputation**
- **Sustained outages would cripple their 5000 partners**

The risk of failure was too big to ignore. They needed confidence in their solution.

THE RISK OF FAILURE WAS TOO BIG TO IGNORE

Like all retailers, our client operates within very tight timescales – It is difficult to maintain a high rate of technological change, whilst ensuring full and robust testing. The opportunities and challenges of 2020 compounded these issues.

Initially, they had tried their own performance testing; Basic workload modelling and performance testing using flood.io. While these tests were a start, they were limited to a thin set of fragmented user journeys. There was no end-to-end view and they quickly realised it wasn't enough.

They turned to the retail performance experts - Spike95.

SPIKE95 ARE THE EXPERTS AT TESTING RETAIL SYSTEMS

Spike95 provide best-of-breed retail performance expertise.

Nobody else has the depth of solutions and experience in this sector. Nobody else had performance tested a marketplace anywhere near this scale – tens of millions of customers. Spike95 also understood that our client needed results. That is, less talk, more action.

Spike95 were tasked with the following deliverables:

- **Establish an accurate workload model**
- **Create reusable performance testing assets**
- **Identify any performance issues and areas of concern**
- **Provide confidence for their peak sales period**

THE SPIKE95 PERFORMANCE METHODOLOGY - RAPID AND ROCK-SOLID

Phase 1 - Analysis and Planning

Spike95 collaborated with our client's technical team to define a test approach address these issues. Together, all parties worked on building accurate workload models to understand current volumes as well as future surges.

During this phase, the Spike95 methodology uncovered a potential bombshell -site visits were double what our client previously thought!

This extra volume wasn't site users but search engine Bots and Crawlers. While vital for marketing and sales channels, they were previously uncounted and created a huge drain on resources. The Spike95 methodology ensured this was detected and factored into the models.

THE SPIKE95 PERFORMANCE METHODOLOGY - RAPID AND ROCK-SOLID

Phase 2 - Iterative Execution Cycles

Spike95 developed a cost-effective performance framework using Open-Source tools; flood.io to execute, JMeter to emulate load, and Java to create data. The combined power gave world-class performance testing and monitoring, without substantial license investment.

Rapid rollout of the framework quickly established key baseline metrics. This gave an early heads-up on their infrastructure and allowed maximum tuning/fix time ahead of the 2020 peak.

THE SPIKE95 PERFORMANCE METHODOLOGY - RAPID AND ROCK-SOLID

Phase 3 - Empowerment and Asset Handover

Our client was involved throughout the project with regular sessions, daily updates, and formal weekly reports. This kept them fully informed and gradually built up their knowledge and comfort with the approach and toolset. By the end of phase 3, they not only knew where they needed to focus, they had also taken ownership of the performance testing assets including:

- **Thorough and proven workload models**
- **A robust, reusable, and easy-to-use performance testing framework**
- **Additional methods and techniques to ramp-up load**

CONFIDENCE GAINED FOR 2020 AND BEYOND

With the help of Spike95, our client was able to prove volumes over 200% of 2019 peak. Not only that, but they had a much better understanding of their infrastructure – they knew where their solution was strongest, and where to focus future effort.

The short performance project achieved all their goals and more:

- **Established workload models for predicted peak and future stretch targets**
- **Identified performance issues and fixes ahead of Black Friday 2020**
- **Provided a reusable and cost-effective performance framework**
- **Drove confidence in their ability to deliver exceptional service during their peak periods**
- **Empowered their team to carry out future performance cycles independently**

THANK YOU.

Spike95
71-75 Shelton Street, London, WC2H 9JQ

+44 (0)20 336 95 95 1
+44 (0)7720 294 725

info@spike95.co.uk
www.spike95.co.uk