

SHINING A LIGHT ON BLACK FRIDAY

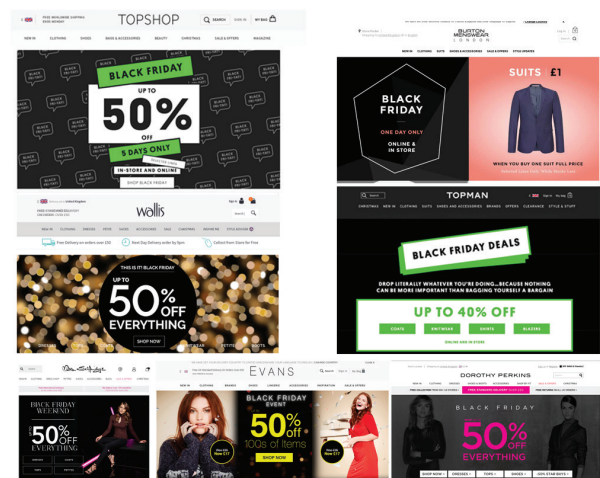
HOW CAPACITAS WORKED WITH ARCADIA GROUP
TO DELIVER ON THEIR BIGGEST TRADING DAY

EVERYBODY KNEW BLACK FRIDAY 2014 WOULD BE BIG, ALTHOUGH QUITE HOW BIG WAS NOT YET FULLY UNDERSTOOD. THE PRESS WERE HYPING THE STORY, SPECULATING BIG DEMAND ACROSS THE WHOLE SECTOR.

Within Arcadia, the IT Group had been testing high-load scenarios to make sure their 46 web-sites on the platform would handle the traffic. There was a lot riding on the performance of online sales in particular. The IT team felt ready for the challenge as the test results showed that the platform had sufficient capacity to cope with forecast demand.

By 6:30am on Black Friday the group was seeing seven to eight times the usual morning load which was increasing at a significant rate. It took an immense effort from the IT Group to try to ensure the platform was able to cope with the weight of traffic, but clearly, this was not going to be sustainable going forward.

A NEW APPROACH WAS NEEDED, SO IT SYSTEMS PERFORMANCE EXPERTS CAPACITAS WERE CALLED IN TO WORK WITH THE IT GROUP TO ENSURE THAT FUTURE SALES WOULD NOT BE PUT AT RISK AS A RESULT OF EXCESSIVE LOAD THAT WOULD INEVITABLY OCCUR ON DAYS WITH HIGH DEMAND SPIKES



Crucially, because of their proprietary test engine and unique methodology, Capacitas are able to load test the live platform itself, instead of just using a performance testing platform. Working on a test platform is conventional in the industry, but misses many of the real world scenarios that puts a production system under sporadic stress. It was only when Capacitas started testing the load on the live platform that the consequences of complex load interactions became apparent. They were able to demonstrate, for example, what would happen if tens of thousands of users were interacting with the basket and stock functions while, at the same time, a warehouse was receipting in a large consignment and updating stock inventory. This level of detailed analysis showed where the 'cascades' were happening and stressing the platform.

The analysis helped identify the root causes and, subsequently, experts were able to re-write code, fine-tune the platform, optimise databases, change cache settings and re-engineer back-end services.



“WE RE-WORKED PRACTICALLY EVERY AREA OF THE PLATFORM BASED ON THIS NEW MODELLING OF DEMAND, BUT WE WOULD NEVER HAVE BEEN ABLE TO DO THIS IN SUCH A TARGETED WAY WITHOUT THE CAPACITAS TESTING OF OUR LIVE PLATFORM. ALL OF THEIR RECOMMENDATIONS WERE DATA-DRIVEN, AND THAT’S WHAT GAVE US CONFIDENCE TO MAKE THE CHANGES.”

Jamie Ovenden,
Arcadia’s Digital IT Director

All of the changes were tested to make sure the problem had really been resolved and, after 10 months of test-analyse-fix-repeat, it was time for the true examination.

BLACK FRIDAY 2015

EVERYTHING WORKED PERFECTLY:

- The web traffic hit the forecast peaks (which were 50% higher than 2014 forecasts)
- The sites traded without issue the whole weekend, recording their highest ever trade volumes and hourly rates.

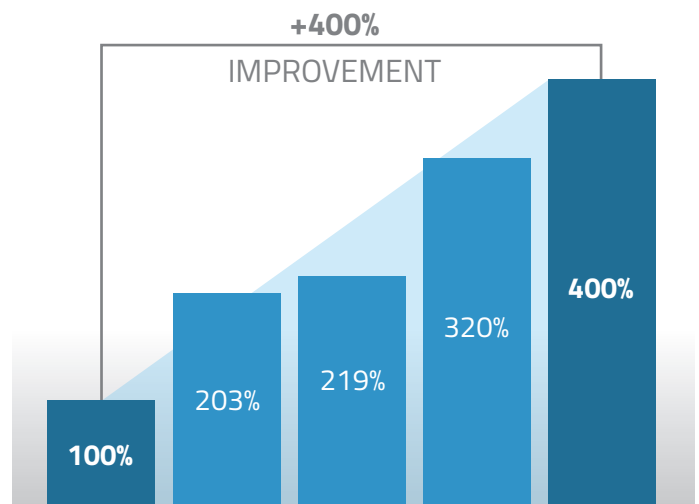
Moreover, Capacitas had given the IT Group the ability to understand how the platform reacted under high load so that real-time adjustments could be made to balance customer expectation with platform performance so that capacity could be optimised and margins maximised. To be able to understand how to do this is very rare; many of Arcadia’s competitors use far cruder methods that simply queue customers, leading to frustration and lost revenue.

HAVING PROVEN THEIR WORTH AND DELIVERED AN OUTSTANDING RETURN ON INVESTMENT, CAPACITAS HAS NOW BEEN ENGAGED FOR TWO MORE YEARS BY ARCADIA TO FUTURE-PROOF THEIR PLATFORM



“I BELIEVE IT IS ESSENTIAL TO HAVE AN INDEPENDENT COMPANY DOING PLATFORM PERFORMANCE TESTING, AND CAPACITAS HAVE PROVEN TO BE A VERY GOOD PARTNER TO WORK WITH. THEIR GENUINE COMMITMENT TO THE PERFORMANCE OF OUR PLATFORM HAS BEEN EXCEPTIONAL AND THEY COMPLETELY UNDERSTAND THAT ENSURING OUR CUSTOMERS ALWAYS HAVE THE BEST POSSIBLE EXPERIENCE IS AT THE HEART OF ARCADIA’S DIGITAL STRATEGY.”

Jamie Ovenden,
Arcadia’s Digital IT Director



Progress on platform order capacity through the Capacitas engagement