

UK Back to School ecommerce performance survey

August 2015

Website testing specialist SciVisum Ltd carried out a study to measure the online back-to-school uniform buying experience, delivered by leading UK retailers.



Executive Summary

Website testing specialist SciVisum Ltd carried out a study to measure the online back-to-school buying experience, delivered by leading UK retailers' websites during the month of August.

The findings show poor levels of availability and the majority of websites struggling to maintain fast page delivery times in the run up to the start of term. In contrast to availability, average page delivery times for most were good however the performance gap between the best and worst page delivery times was very clear.

Over the period there was a steady decline in page delivery speeds across all websites monitored as traffic ramped up in the run-up to the return to school.

SciVisum monitored dynamic user journeys across UK retailers for the month of August. The user journeys replicated a customer navigating school uniform, selecting a polo shirt / school top at random and adding it to the basket. Results were analysed for business hours of 8 am – 11 pm, to eliminate errors and slowdowns relating to maintenance issues.

The study was carried out on the following leading British retailers websites: Tesco, Next, Littlewoods, Very, Asda, Debenhams, John Lewis, Matalan and M&S.

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Back to School eCommerce Background

Just as families the length and breadth of the country were enjoying their well-earned summer break, clothing suppliers ramped up their preparations to feed the back-to-school buying frenzy that marks August as a profitable online opportunity for uniform stockists.

With the buying window limited by holiday time on the one side and the first day of term on the other, it is crucial for retailers to optimise the online experience by ensuring that shoppers have quick and easy access to the products they need, and that the checkout process can be navigated without a hitch.

Testing Methodology

Testing was carried out with SciVisum's 24/7 Monitoring Service, on UK injectors. Monitoring was repeated every five minutes throughout the month, measuring availability (time without errors), speed and consistency. Any errors that prevent a customer from completing their journey were also measured.

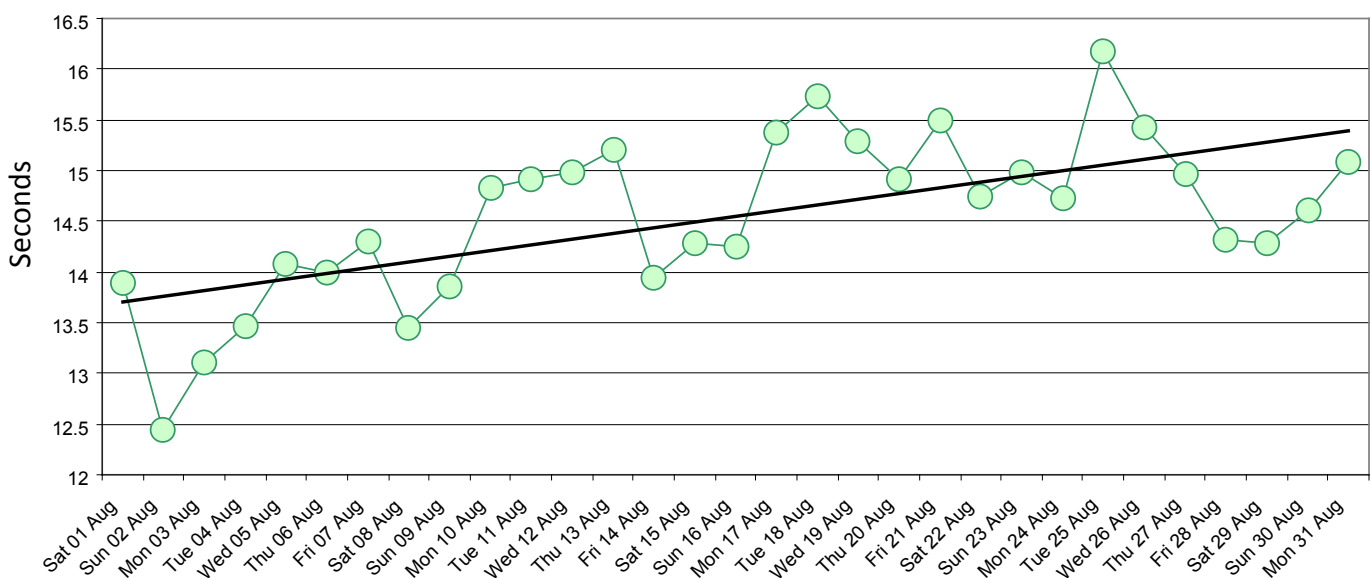
Although monitoring was maintained round the clock, only journeys between 8am and 11pm were analysed, to eliminate any routine maintenance periods.

SciVisum's monitoring acts as real users would, making random choices during the course of the online customer journey rather than moving through a set of predefined URLs, thus identifying all issues impacting the end user and providing the most accurate results.

Page Delivery Times

As can be seen from the chart below, journey delivery times increased steadily during the course of the month, indicating an increase in traffic and an inability by the majority of sites, to maintain the same speed as at off-peak times. Weekends were much faster, possibly because customers preferred to shop for these items during the working week.

Average Journey Delivery Time - August 2015

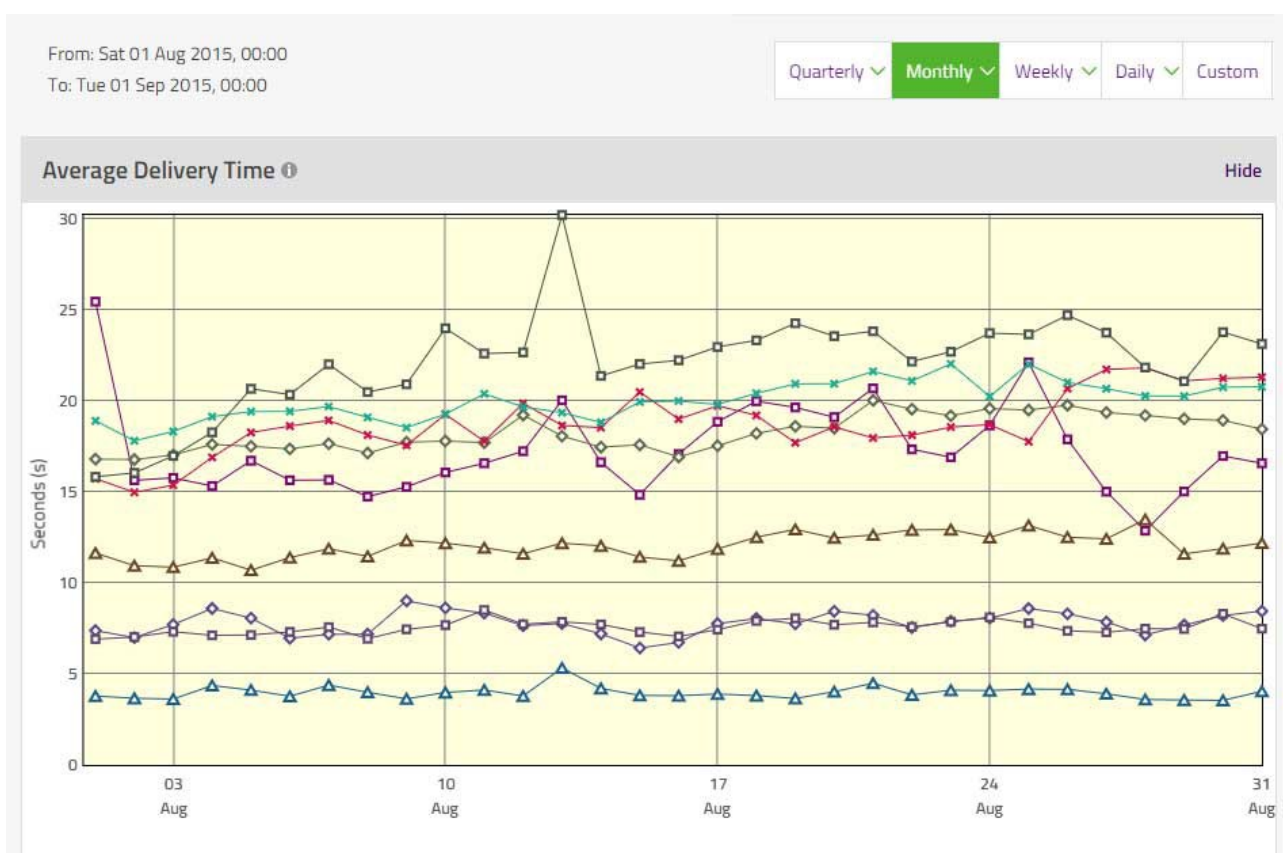


In general, individual page delivery times averaged 2.9 seconds across all sites for the duration of the survey.

Google's expectation is for page delivery 'Above The Fold' in less than 1 second and full page delivery in less than 2 seconds. This is now a common consumer expectation for page speed. Five of the nine sites achieved average page delivery times in under 2 seconds.

The 'speed' gap between the best and worst performing sites was substantial (see chart below) – the worst site being more than five times slower (23.4 seconds) than the fastest (4.1 seconds) for the average journey time.

The chart also shows that the faster sites (the bottom three curves on the graph) delivered much more consistent speeds and were better able to maintain the same speed as back-to-school approached. So whilst the best performers are doing well at delivering user experience, it seems there is still room for improvement for the majority.

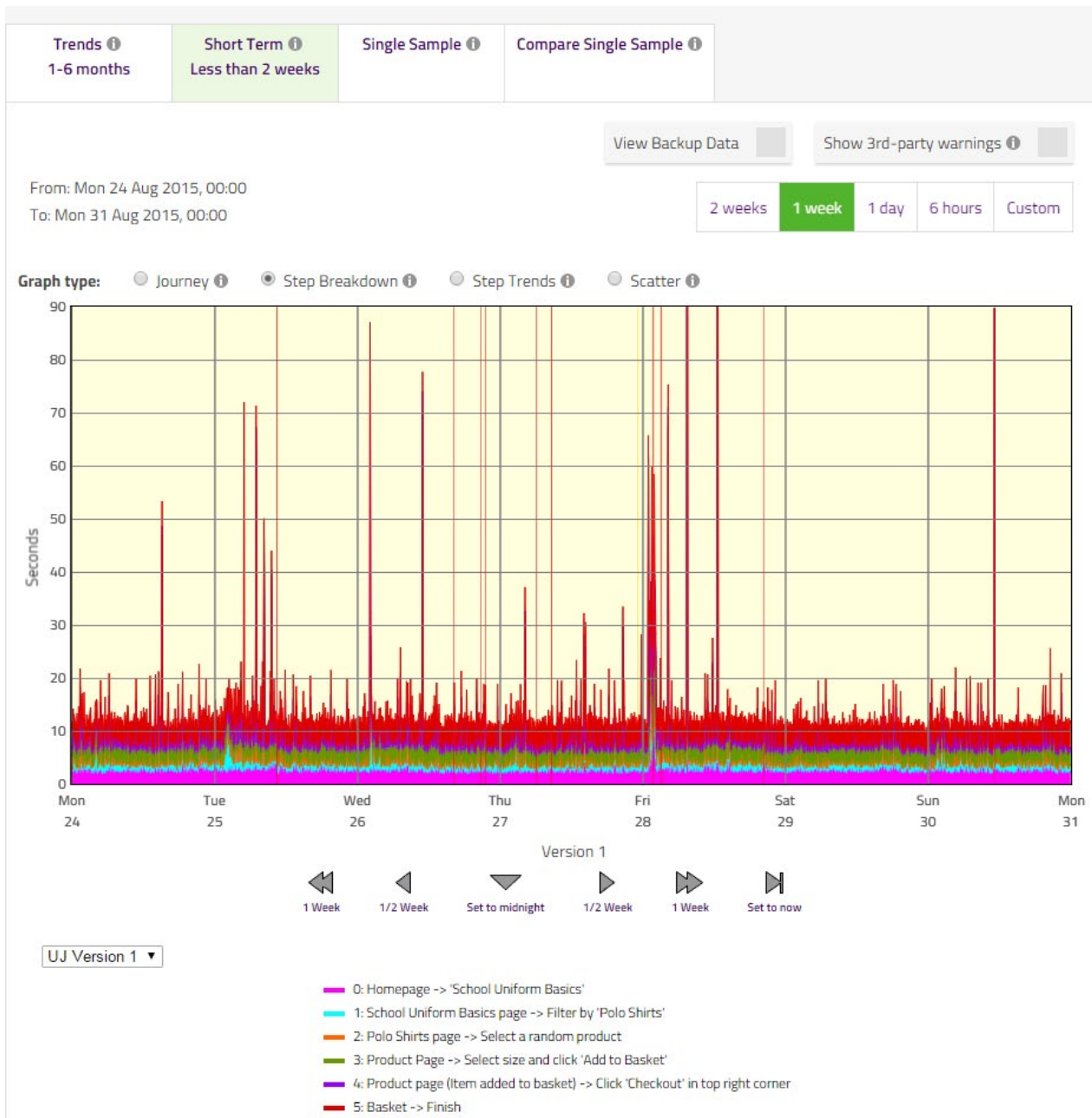


SciVisum Monitoring screenshot: Performance graph showing journey delivery times across each site/user journey.

Those retailers with the fastest page delivery times weren't necessarily the same as those with the fastest journey times. There may have been more steps to navigate, making the journey as a whole longer despite fast page delivery. It's important when considering user experience, to measure the journeys as a whole rather than looking at specific pages. For example optimising on a

page-by-page basis may improve performance for that specific page but not necessarily across the entire journey.

The chart below highlights the role of each step in the performance of the whole journey. It shows a breakdown of one of the journeys SciVisum monitored, with performance for each step denoted in a different colour.

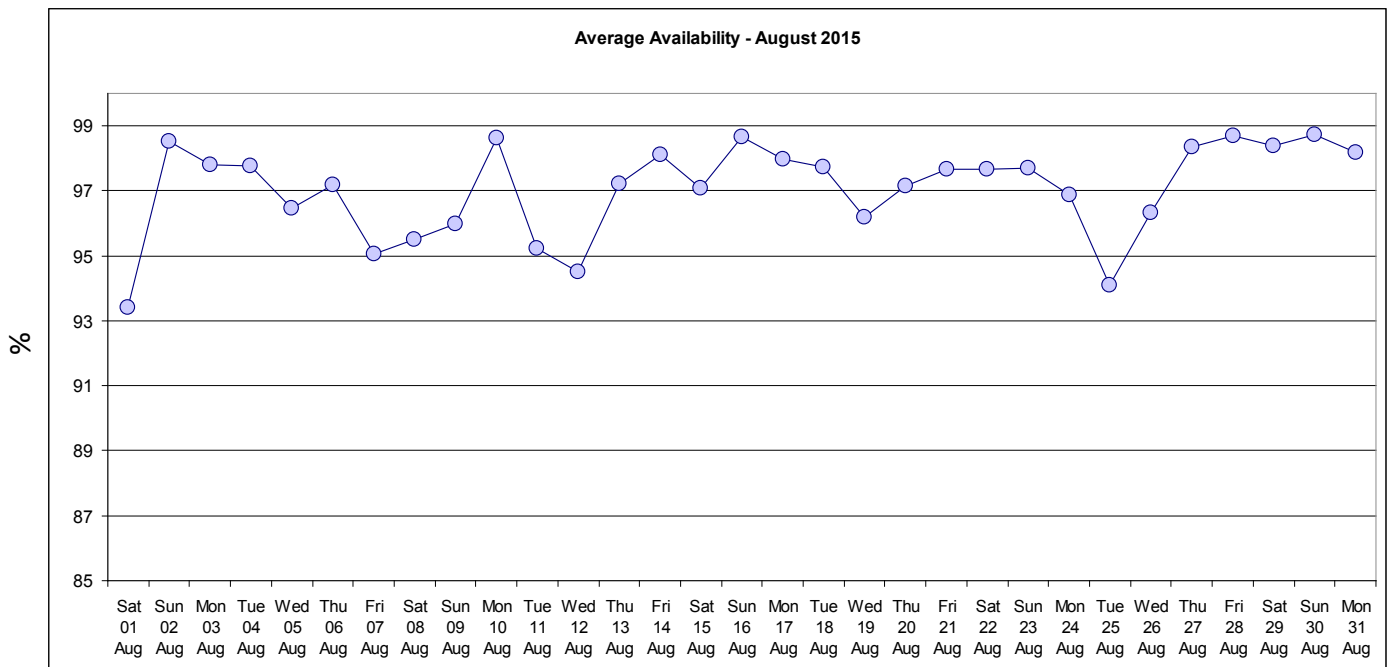


SciVisum Monitoring screenshot: Performance graph showing breakdown of each step within the journey

Availability

In contrast to speed, availability was very poor averaging only 97.1% for all sites throughout August. Only two of the nine sites achieved average availability greater than 99%, and in one case, as low as 89%. While these may seem like relatively high percentages, if a site is unavailable for a small fraction of the time, it can lead to significant numbers of lost sales opportunities.

Average Availability - August 2015



Page Size

Page sizes were reasonable by today's standards, averaging 716 Kb. Two sites had pages smaller than 500 Kb. Only one site had average page sizes greater than 1 Mb.

Problems uncovered

SciVisum's dynamic monitoring approach identified lots of problem areas, including missing user reviews, blank page content and absent colour swatches - usually resulting from cache or CDN issues. Here are some specific problems SciVisum uncovered.

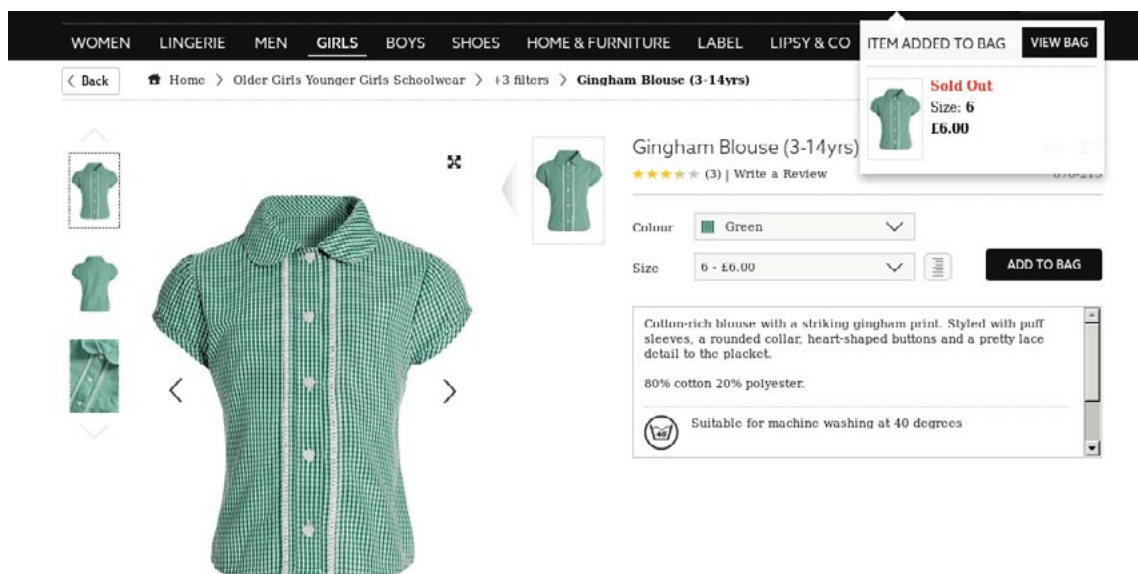
1. Too many third party components

One retailer's website supported a huge number of third-party components (over 280), mainly for advertising purposes, as well as tracking components from Russia's largest search engine. Unfortunately, many of these components were broken and adversely impacted journey times.

Keep third party components to a minimum and use deferred loading and execution of third party scripts such as adverts, analytics and social media.

2. Online customer journeys not following best business practise

We found a leading fashion retailer enabling customers to add out-of-stock items to their cart. This is not best business practise and very frustrating for end users, much better to inform of stock issues before adding to basket and prevent use of the 'add to basket' button when items are out of stock.



SciVisum Monitoring screenshot: Out of stock page as seen by the end user, recreated with SciVisum's 'Journey Replayer' feature

3. Large variation in performance between specific journey steps: indicating potential backend errors

On some sites we noticed very slow add to basket steps compared to product pages. In one case this was very noticeable and can indicate backend database or server code issues. The screenshot shows less consistent and slower delivery of the add to basket step (in purple) versus much faster, more consistent delivery of product pages (orange).



SciVisum Monitoring screenshot: Slower, more inconsistent 'Add to Basket' step of the journey, visible in purple

Which retailers earned an A*?

All retailers were giving an overall performance ranking based on the key metrics measured during the survey period. Matalan came out on top followed by John Lewis and in third place Tesco.

John Lewis continue to perform well, also coming in the top 3 of our [Christmas mCommerce Survey](#) last year.

Top 5 - Overall	
1	Matalan
2	John Lewis
3	Tesco
4	Next
5	Asda

Top 5 - Availability	
1	John Lewis
2	Matalan
3	Asda
4	Tesco
5	Debenhams

Top 5 - Page Speed	
1	Next
2	Tesco
3	Matalan
4	John Lewis
5	Asda

Takeaways: Give the customer the experience they deserve

To deliver great website performance, you need an ongoing process to continuously test user journeys from the customer down and ensure performance is managed.

Here are a few recommendations for delivering outstanding user experience.

1) Understand the experience you're site is delivering 24/7

Ensure key user journeys are monitored 24/7 - from the customer down. Dynamic monitoring identifies issues that more basic monitoring is unable to uncover.

2) Ensure journeys can support peak traffic

We recommend load-testing well in advance of busy periods so you'll be confident your website can support peak traffic.

3) Optimise your journeys as whole

Think in terms of optimising whole customer journeys, rather than optimising on a page-by-page basis, as what may improve performance for a single page won't necessarily enhance performance across an entire journey. Keep page components to a minimum, optimise images and minify css and JavaScript.

4) Involve all teams in website performance

Web performance is no longer the sole domain of the tech team. Bad performance equals reduced conversion rates and damages brand perception, which makes it more important than ever to share information at every level. With so many teams involved in online service delivery, synergy across those teams drives much greater business benefits. Universal metrics that can be understood across disciplines and shared information are key to delivering the best experience for users.

5) Consider an independent, 3rd party testing service

Using a high-touch monitoring service, like SciVisum, makes it possible to manage the complexities of delivering a website across multiple devices, so you can focus on business development instead of trouble-shooting performance problems.

Average survey metrics

Availability	97.1 %
Page delivery	2.9 seconds
Page size	716 Kb
Consistency (standard deviation)	1.32

Appendix

Notes on testing methodology

Monitoring was performed by SciVisum's 24/7 Web performance Monitoring service.

The service emulates users making complete journeys across your site, giving uniquely realistic visibility of your mobile experience. Journeys are sampled at 5 minute intervals.

All testing took place on UK websites using test injectors based in the UK.

About SciVisum Ltd

For over 10 years the UK's largest online names such as Debenhams, Boden, Joules and Dixons have chosen SciVisum to maximise user experience and protect their brand. For those seeking a realistic measurement basis on which to base budget and planning decisions SciVisum are the number one choice with their unique, dynamic user journey approach for website monitoring and load testing services.



Our highly experienced team of test professionals help clients implement monitoring programmes and pro-actively oversee testing; automatically updating journeys as a website changes, highlighting performance issues and helping clients quickly pinpoint root causes - saving time and money.

To find out how SciVisum can help you implement the best monitoring programme to suit your organisation please contact us on 01227 768276 or visit our website at www.scivisum.co.uk

Related reports and guides available on the SciVisum website

[‘UK ecommerce performance report Easter 2015’](#)

[‘Christmas 2014 ecommerce mobile experience report’](#)

[‘Top 12 Tips for Xmas ecommerce performance’](#)

[‘Meeting the challenges of modern website performance’](#)

[‘Steps to implementing a holistic web performance monitoring programme’](#)

[‘How to plan a successful Load Testing programme for modern websites’](#)