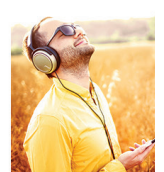
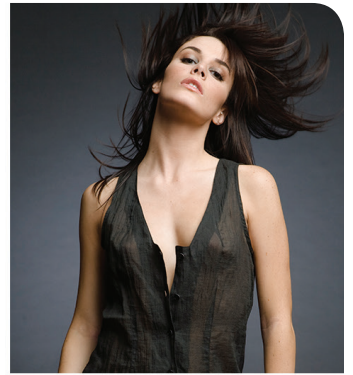


Scaling Your Online Retail Business

amazonwebstore





SCALING PROBLEMS – AND SOLUTIONS FOR ONLINE RETAILERS

Black Friday. Flash sales. High profile site launches. These are undertakings that require a stable, scalable, infrastructure—one that gives you the bandwidth you need on demand, works on multiple devices, keeps customer satisfaction high, and maintains the retailer’s online presence, no matter what kind of traffic hits.

“Taking various estimates into account, the average company can expect to be down more than 10 hours per year at a cost of \$100,000 per hour.”¹ – *Wired*, December 2012

Retailers who lack the infrastructure to handle unpredictable traffic face many risks — lost sales is a big one. If the site goes down or simply performs poorly, customers will look elsewhere and the sale is gone. When Paypal’s online payment system went down in 2010, Shop By System — a Paypal merchant — estimated a loss of 25 to 30 percent of the day’s potential sales.²

While the biggest risk of having an unstable infrastructure is the potential for lost sales, there are additional challenges including scaling the retailer’s online catalog and managing the fulfillment of orders from that catalog. Retailers need to be able to change their offerings rapidly by adding or editing items. In addition, they need to provide fulfillment services that meet changing customer demands without compromising on customer service.

Scaling for Traffic

If a retailer’s site is running on local servers that lack the capacity to support an unexpected influx of traffic, the effects often aren’t immediate but they can be devastating. First, the site can slow down resulting in users experiencing an increase in page load times and page load errors. If the in-house IT team catches the performance issues, they may be able to deploy additional servers —



but by the time they've put the hardware in place to accommodate the traffic, sales have likely been lost.

If a retailer's site is hosted by a provider that doesn't scale well, the site and other sites that share server space may go down. The end result remains the same – lost sales, not just for the retailer itself, but for other businesses using the same platform as well. Afterwards, there's the hassle of bringing the site back online, creating continued downtime which affects the company's bottom line.

Although some providers offer additional bandwidth, inaccurately forecasting traffic can increase cost. In anticipation of a large event, a retailer may purchase too much or too little bandwidth. It may end up not being used or there may not be enough bandwidth, which will cost a premium to add late in the game. In the end, this variable cost coupled with insufficient scaling capabilities translate to lost sales.

Traffic Spikes? No Problem.

In November 2012, Netflix was reported to use nearly one-third of North America's bandwidth.⁴ Not only does Amazon Web Services support Netflix, but it also supports Staples, Instagram, Reddit, Dropbox, Airbnb, The Guardian, Pinterest, UrbanSpoon and many others — all while hosting Amazon's own retail business.

Marks and Spencer, one of the largest retailers in the UK, decided to also take advantage of the extensive hosting and bandwidth of Amazon Web Services. When they launched their online outlet store, they received unexpected media coverage which tripled their anticipated traffic.

"You couldn't buy the kind of publicity we had on day one," said William Gill, Head of Merchandising, Outlet Division at Marks and Spencer. "There were feature stories on the radio and on national television, and it was all over the Internet that we were launching

“ ... it was all over the Internet that we were launching an online version of our discount stores and teaming up with Amazon to make it happen.

- William Gill
Head of Merchandising
Marks and Spencer, Outlet Division

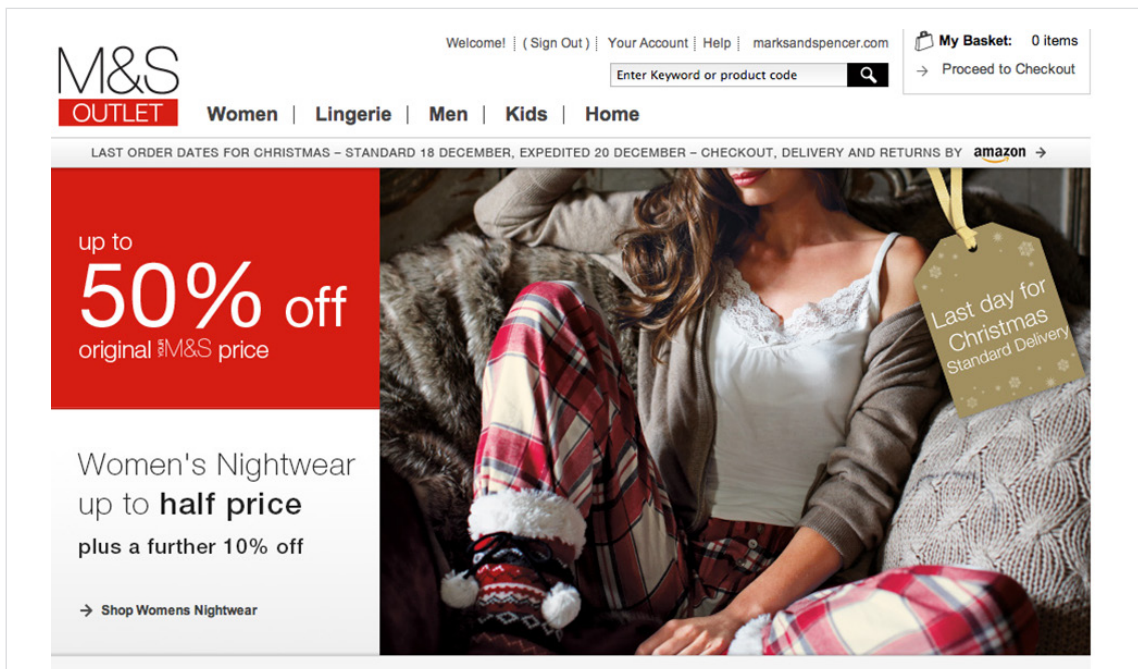


an online version of our discount stores and teaming up with Amazon to make it happen.”⁵

With Amazon Webstore’s platform, Marks and Spencer was ready and capable of handling this massive amount of unanticipated traffic.

Amazon Webstore is also the platform of choice for a flash sales retailer that attracts approximately 150,000 visitors per minute at peak times and processes five orders per second. Prior to using Amazon Webstore, the retailer consistently saw crashing and latency issues at 96,000 concurrent users – half of what they needed to maximize their sales opportunities.

Since this company’s business model is dependent on flash sales, they require hosting that is reliable enough to handle huge traffic spikes during a short period of time. To ensure the stability of its platform, Amazon performed extensive load testing to ensure that the nearly 1.5 million requests could be handled efficiently by their servers. Working with Amazon Webstore, the company was able to triple their peak sales – serving



as many as 3000 users in a five minute period. Amazon Webstore's ability to scale automatically as traffic increases allows the company to take full advantage of the buzz created by their email marketing flash campaigns.

Additional Benefits and Support

With Amazon Webstore, IT support for a robust retail platform doesn't have to be a retailer's core competency. Backed by Amazon Web Services' EC2 hosting, the Amazon Webstore platform makes dynamic adjustments to bandwidth as needed during high traffic events. This means that in-house resources can focus on retail objectives rather than server allocation, site latency, bandwidth, and other scalability issues.

Scaling for Inventory

After their successful initial launch, Marks and Spencer continued to expand their online offerings, adding an additional 1000 items while still effectively managing the existing online stock.

"We particularly like the ability to feature new inventory and set promotions on the site in a dynamic way," says Stewart Wright, Website Manager at Marks and Spencer.

"As an outlet, our inventory and our pricing frequently change. With Amazon Webstore, we have the flexibility to make changes to the site in an agile way depending on what merchandise we have in stock."



UNIONBAY, a manufacturer turned retailer, faced similar challenges. They needed an eCommerce platform with rapid implementation, flexibility for expansion, and high ROI.

"We wanted new sales channels – going online allowed us to sell to consumers that don't have access to large department stores. We started with one line – UNIONBAY – but now we have three," says Danna Ramberg, Director of IT at UNIONBAY Sportswear. "We recouped our setup costs in no time. Once we had the infrastructure in place, it was a no brainer to expand."

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Additional Benefits and Support

Amazon's global catalog manager provides a user friendly interface that allows companies to sell available inventory on their own website as well as Amazon.com. This gives retailers two points of sale for their products, both easily manageable through a single interface. For example, products that are

out of stock can easily be managed with the global catalog manager and any updates will be reflected in both locations simultaneously. In addition, products can be added or updated one at a time or in bulk using feeds that help manage large product catalogs.

Tribune Photos, an online photo archive that offers decades of original photos, uses the Amazon Webstore platform to make nearly 1.6 million items available for purchase. Since all their items are unique and one of a kind, it's critical that they have an easy to use interface for managing their inventory. With the ease and scalability of Amazon Webstore's platform, the catalog is updated constantly and new items are added and removed on a regular basis.

The screenshot shows the 'TRIBUNE PHOTO ARCHIVES' website. At the top, there is a navigation bar with links for 'Sign In', 'New Customer?', 'Your Account', and 'Help'. Below this is a search bar with the text 'Search by Name, Subject or SKU' and a 'Search!' button. The main content area is titled 'Animals and Insects - Horses' and contains a grid of photo items. Each item includes a thumbnail image, a title, a price, and the source archive. For example, one item is 'BCY-724-BS Photo of Baltimore Sun Photo Ponies' priced at \$14.99. The sidebar on the left lists various categories like 'Actors', 'Agriculture', and 'Animals and Insects'. The bottom of the page shows a footer with 'Baltimore Sun Morning Call' and 'BS PHOTO hgm-005'.

Scaling for Fulfillment

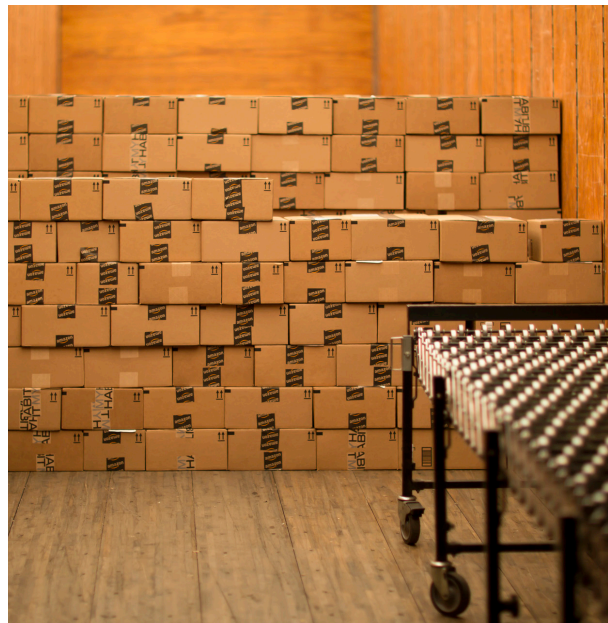
The remaining challenge with rapid scaling is product distribution. Picking, packing, and shipping processes require warehouse space and fulfillment operations that must scale to meet order demands. There are costs associated with fulfillment that cut sharply into margins.

“We came to the conclusion that running a brick-and-mortar type of facility was way too expensive in terms of the cost of rent, the cost of employees to man it, and all of the small costs you don’t really understand when you have your own facility—insurance, alarm systems, separate phone systems, and so forth.”⁶ - Rob Goodwin, Too Cool Inc.

Too Cool now uses Fulfillment by Amazon (FBA) for all the warehousing and shipping services that were carving into their bottom line, and as a result, have dramatically improved their profit margins by doing so. FBA provides the same seamless change of scale in fulfillment services that Amazon Webstore provides for hosting and bandwidth and FBA’s integration with Amazon Webstore is transparent.

“Shipping through Amazon really gave me my freedom back.

- Kath Wojtczak
Element Jewelry



“I was spending five to six hours a day just picking and boxing the orders, printing packing slips, typing up shipping labels, driving to the post office—all while trying to keep up with everything else I had to do,” says Kath Wojtczak of Element Jewelry. “Shipping through Amazon really gave me my freedom back. Now I just send my inventory to Amazon and let the warehouse manage the rest.”⁷

Fulfillment by Amazon gives retailers access to one of the most advanced, world-class fulfillment networks in the world. The service supports any business size, from smaller retailers to companies like Redcats Inc, a women’s apparel company that used Amazon fulfillment to ship nearly 10 million dollars of inventory in 2012.⁸ Amazon added 17 fulfillment centers that same year – the warehouse in Phoenix, Arizona alone is

1.2 million square feet. Now, there are 80 warehouses worldwide that provide more than 60 million square feet of warehousing.

Fulfillment center staffing is increased at peak sales times, like the holidays, so there are no bottlenecks or service outages. Retailers can also continue to house their own shipping and use FBA strictly on an as needed basis. For example, if they're anticipating a run on a specific item, they can use FBA to warehouse and ship that particular item and continue to use their own in-house fulfillment for all other products.

Additional Benefits and Support

Using FBA enables retailers to give customers access to free two-day shipping with Amazon Prime and creates greater customer satisfaction. FBA can even ship merchandise in brand neutral packaging rather than Amazon's labeled boxes which

allows retailers to maintain brand ownership. Should the need arise, Amazon has full service returns as well.

FBA gives Amazon sellers the flexibility to cancel orders, issue refunds, manage exchanges, and provide all the services that a warehouse would normally provide for a retailer.

Focus on Sales, Not on Resources

Amazon Webstore's flexible platform and built-in support means that retail businesses can focus on what's most important to their bottom line: growing sales.

amazon webstore

Amazon Webstore is a complete commerce platform that enables companies to leverage Amazon technology and expertise in building and managing their direct-to-consumer business.

Commerce sites built on the Amazon Webstore platform utilize Amazon's powerful cloud infrastructure and payment processing technology to deliver a scalable, secure online shopping experience to customers. Amazon Webstore also integrates seamlessly with selling on the Amazon Marketplace and using Fulfillment by Amazon, Amazon Prime, and other Amazon Services.

To get started with Amazon Webstore, visit the website at webstore.amazon.com or [contact the Amazon Webstore team](#) directly.

- ¹ Wired. "Invest in Uptime or Face Retail Nightmare Before Christmas." Accessed November 6, 2013. <http://www.wired.com/insights/2012/12/invest-in-uptime-to-avoid-the-nightmare-before-christmas>.
- ² Computerworld. "PayPal Outage Leads to Concern, Frustration." Accessed November 6, 2013. http://www.computerworld.com/s/article/9194743/PayPal_outage_leads_to_concern_frustration.
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- ⁴ Techradar. "Netflix accounts for one-third of all North American bandwidth." Accessed November 6, 2013. <http://www.techradar.com/us/news/internet/netflix-accounts-for-one-third-of-all-north-american-bandwidth-1110904>.
- ⁵ Amazon Webstore. "How Marks and Spencer Grew its Business with Amazon Webstore." YouTube video, 2:34. December 27, 2012. <http://www.youtube.com/watch?v=Ejf31ben88k>.
- ⁶ Amazon Webstore. "Making eCommerce Efficient in a Down Economy." Accessed November 6, 2013. <http://ecx.images-amazon.com/images/I/C1Leyd%2Bsv6S.pdf>.
- ⁷ Amazon Services. "Kathy finds the life of her dreams." Accessed November 6, 2013. http://services.amazon.com/content/case_studies_element_jewelry.htm.
- ⁸ Bloomberg. "Amazon Wrings Profit From Fulfillment as Spending Soars: Tech." Accessed November 6, 2013. <http://www.bloomberg.com/news/2012-03-21/amazon-wrings-profit-from-fulfillment-as-spending-soars-tech.html>.