



Demonstrating Adobe Commerce's enterprise scalability

Accenture testing confirms large enterprises can realize the full power of Adobe Commerce across their consumer and business customer bases



Overview

[Adobe Commerce](#), powered by Magento, is a flexible and scalable end-to-end digital commerce platform that enables businesses across industries to manage, personalize, and optimize the e-commerce experience for their business-to-consumer (B2C) and business-to-business (B2B) customers – throughout the entire customer journey and across every touchpoint. Adobe Commerce is a leader in this category of solutions, as reported in the [2021 Gartner® Magic Quadrant™ for Digital Commerce](#).

Given its established strength and wide use among small and medium-sized businesses (SMBs), the natural question was: Can Adobe Commerce scale for use by large enterprises?



Testing Adobe Commerce's capabilities – at scale

What Accenture did

Accenture set out to answer this question by conducting rigorous testing of Adobe Commerce's [Cloud Pro120 Cluster](#) suitability for large-scale business-to-consumer (B2C) and business-to-business (B2B) environments.

For the purpose of this performance test, large enterprises are defined as having a global footprint and transacting a substantial portion (>40%) of gross revenue through an online commerce platform while having large, complex product catalogs, pricing and promotion rules with extensive back-office and third-party integration.

To do this, we created and conducted automated test cycles that simulated the processing of large numbers of simultaneous inquiries and orders under two different scenarios:

B2C

demonstrating that Adobe Commerce can handle 15,000 concurrent consumer users submitting more than 1,000 orders per minute

B2B

demonstrating that Adobe Commerce can handle 1,000 concurrent business users submitting 500 orders an hour with 750 items in their cart

Given the different characteristics and challenges for businesses selling to consumers and businesses, we split our testing profiles and cycles into separate B2C and B2B scenarios. For each scenario, our testing flows and performance measurements were based on simulated day-to-day store activities and realistic customer transaction volumes.

The solution's performance met or – in some cases – exceeded the target benchmarks, demonstrating that the largest enterprises can reap the full benefits of Adobe Commerce across their sizable customer bases.



B2C: simple catalogs, heavy traffic

First, let's take a closer look at our B2C testing. B2C businesses – those selling direct to consumers (DTC) – tend to have large but relatively simple product catalogs, and very high volumes of concurrent customers both browsing and placing orders on their websites. What's more, their levels of customer traffic can vary widely, experiencing dramatic spikes in volume during sales promotions or seasonal events like Black Friday and Cyber Monday.


Taking these characteristics into account, we based our B2C benchmarking on the metrics shown in Figure 1 – with a catalog of 250,000 products and 15,000 concurrent users submitting 60,000 orders an hour, or 1,000 orders per minute. Also, each simulated user submitting an order was configured to put three to five items in their cart.

B2C

Figure 1: Our B2C testing benchmarks for Adobe Commerce

60k 
Orders/hour

2M 
Pageviews/hour

15k 
Concurrent Users

15 
Websites

250k 
Products

The testing took place in three stages:

- Stage 1: First we launched the ramp-up – lasting about half an hour – where our automated load generators created the simulated traffic from our 15,000 simulated customers.
- Stage 2: Once this traffic was generated and up and running, we conducted a one-hour run during which the simulated users browsed continually, adding products to their carts and submitting orders for them, while we monitored the system's performance.
- Stage 3: The final step was the wind-down, where we collated and assessed the results.

We ran the B2C cycle five times, with tweaks to the configuration to optimize performance.



B2B: complex catalogs, large carts

B2B eCommerce has very different characteristics from B2C, so we developed and applied a different set of conditions and benchmarks to reflect this.

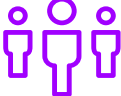
What are the differences? For starters, B2B businesses tend to have more complex catalogs with a wider and more complicated mix of products and components. They also usually experience lower and more consistent levels of customer traffic than B2C businesses, but with each customer putting more items in their cart. To handle all these factors, we came up with the B2B benchmarking metrics shown in Figure 2. Notably, while each simulated user had three to five items in their cart, with business customers it was 750 items.

B2B


Figure 2: Our B2B testing benchmarks for Adobe Commerce

575 
Orders/hour

150k 
Pageviews/hour

5k 
Concurrent Users

15 
Websites

750 
Items in cart

Our B2B testing cycle followed the same three stages as our B2C testing. However, we ran only two B2B flows, with Adobe Commerce quickly demonstrating its ability to handle the level of traffic and complexity of inquiries and orders submitted by our simulated business customers.





The outcomes achieved

Adobe Commerce easily met or surpassed the test benchmarks Accenture had developed for both B2C and B2B eCommerce.

With B2C transactions, the platform successfully processed 62,000 orders per hour or 1,033 per minute, exceeding the benchmark of 60,000 per hour or 1,000 per minute. With B2B it achieved 575 orders per hour with 750 items in their cart.

The results demonstrate that Adobe Commerce can scale up to provide personalized experiences across the entire base of consumer or business customers of large enterprises. While existing enterprise users may already know this, those currently vetting an eCommerce platform can now include Adobe Commerce in their assessment process with confidence that it will meet their growing needs.

1,033

B2C orders handled by Adobe Commerce per minute, against a benchmark of 1,000

575

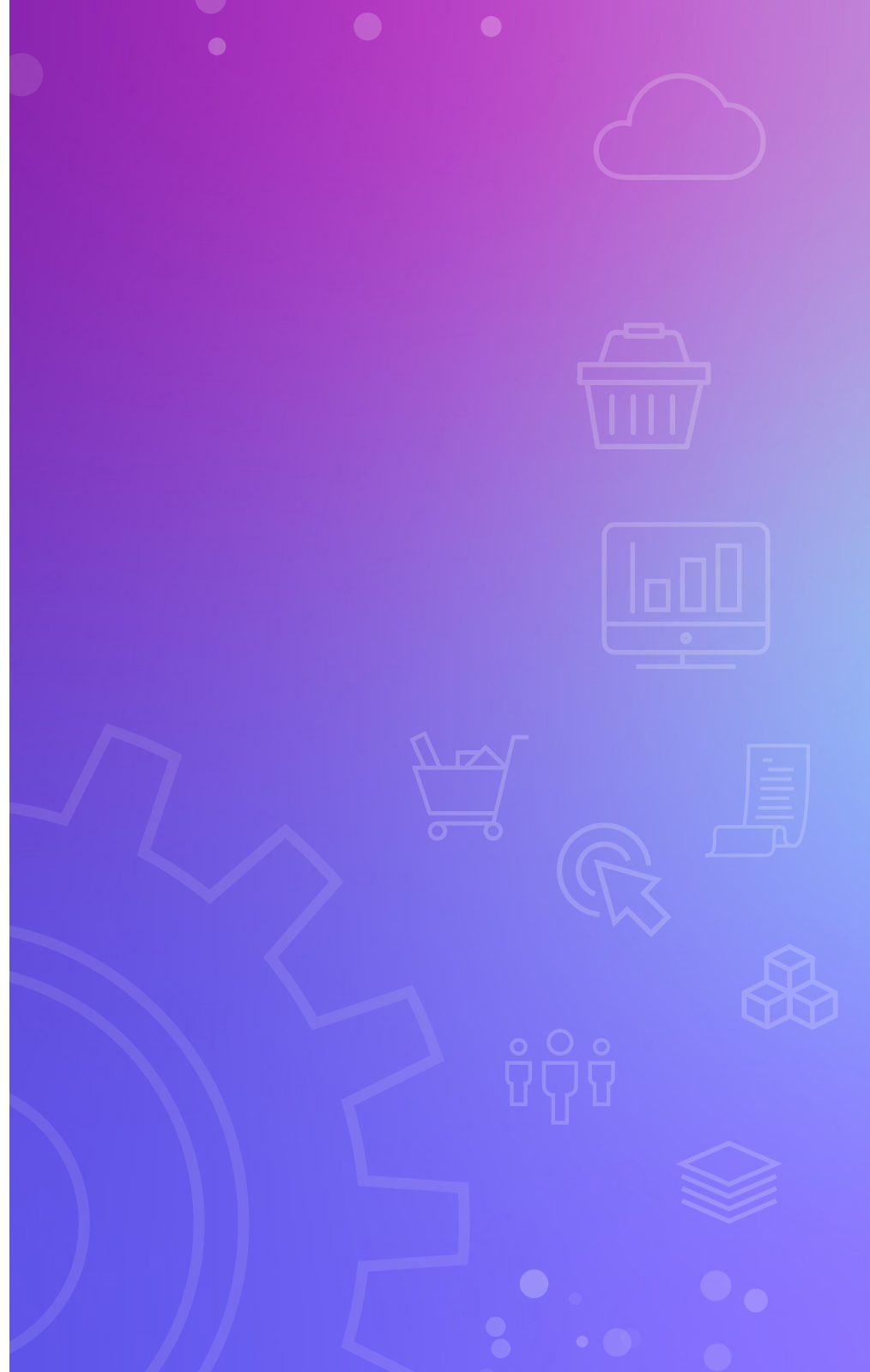
B2B orders handled by Adobe Commerce per hour, against a benchmark of 500 and 750 items in their cart



The future is set for continued growth

During the past two years, consumers' rising use of eCommerce – including [social commerce](#) – has triggered increased adoption of eCommerce solutions by businesses selling to both consumers and other businesses. Going forward, digital commerce will remain a key source of business – and a way of life for customers – with the eCommerce market set to reach [US \\$27 trillion](#) by 2027.

As the growth in eCommerce continues, the question becomes: What platform makes the most sense for your business? For enterprises looking to adopt an eCommerce platform to enhance the buying experiences for their business or consumer customers, the message from our testing program is clear. These businesses can consider Adobe Commerce with confidence that it can scale to meet their needs, today and into the future.



Authors

Piotr Siejczuk

Accenture Adobe Commerce
Global Architecture Lead

Andy Brazelton

Accenture Adobe Commerce
Community of Practice Lead

About Accenture

Accenture is a global professional services company with leading capabilities in digital, cloud and security. Combining unmatched experience and specialized skills across more than 40 industries, we offer Strategy and Consulting, Song, Technology and Operations services — all powered by the world's largest network of Advanced Technology and Intelligent Operations centers. Our 699,000 people deliver on the promise of technology and human ingenuity every day, serving clients in more than 120 countries. We embrace the power of change to create value and shared success for our clients, people, shareholders, partners and communities. Visit us at www.accenture.com.

Contact

Vikalp Tandon

Managing Director
Song, Global Commerce Lead
vikalp.tandon@accenture.com

Disclaimer: This content is provided for general information purposes and is not intended to be used in place of consultation with our professional advisors.

This document refers to marks owned by third parties. All such third-party marks are the property of their respective owners. No sponsorship, endorsement or approval of this content by the owners of such marks is intended, expressed or implied.

Copyright © 2022 Accenture. All rights reserved. Accenture and its logo are registered trademarks of Accenture.

This content is provided for general information purposes and is not intended to be used in place of consultation with our professional advisors. This document refers to marks owned by third parties. All such third-party marks are the property of their respective owners. No sponsorship, endorsement or approval of this content by the owners of such marks is intended, expressed or implied.

