catchpoint

2025
Retail Website Performance
Benchmark Report

Catchpoint Industry Benchmarks

Executive Summary

The holiday season is when digital storefronts make or break retail performance, and our data shows which retailers are truly ready. This report analyzes the NRF Top 50 Global Retailers using Catchpoint's Global Agent Network of 3,000+ vantage points worldwide and our proprietary Digital Experience Score (see page 17 for methodology). It reveals how leading brands like Apple, Amazon, and IKEA actually perform when customers go online.

Key takeaways

Big revenue doesn't mean a fast site

One of the world's top 10 retailers generates over $50B in annual revenue but averages **9.4 seconds** to load its homepage — potentially leaving **$3.4B–$24.1B** in yearly revenue on the table due to slow performance.*

Performance is the great leveller

Action, one of the smallest retailers in the benchmark with ~$15B in revenue, ranks **#2 overall** with a near-perfect 99/100 digital experience score, showing that exceptional performance isn't reserved for the biggest brands.

Same store, wildly different wait times

The same retail websites loaded in just **2 seconds** in some places… and nearly **30 seconds** in others, making them over **13× slower** for customers on the wrong end of the connection.

Big-city shoppers aren't safe from slowdowns

In U.S. tests, **Aldi** loaded in under **1 second** on one network but took almost **2 seconds** longer on another, even in major cities with strong internet.

Retailers are leaving customers behind

in Asia and Africa, shoppers wait up to **3× longer** for the same site to load compared to North America and Europe.

'Always on' doesn't mean 'always good'

16 major retailers had near-perfect uptime yet still scored poorly on user experience, proving that being online isn't enough – performance matters.

**Estimated revenue impact calculated using industry benchmarks for conversion uplift per second faster load time*

Full rankings: Retail website performance

The table below shows all evaluated retail websites ranked by their overall Digital Experience Score.

How to read the scores:

- **Leading (90–100)**: Seamless, fast, and globally consistent digital experience. These retailers are setting the standard for performance at scale.
- **Strong (83–89)**: Solid digital foundations with room to optimize front-end performance, global consistency, or visual stability.
- **Competitive (66–82)**: Functionally acceptable, but risks remain — particularly on mobile performance or in specific regions.
- **Challenged (<66)**: Digital friction is likely impacting customer satisfaction, conversion, and long-term loyalty.

Rank	Retailer	Experience Score
1	Aldi	100
2	Action	99
3	IKEA	98
4	Euronics International	97
5	Aspiag	97
6	Apple	96
7	TJX Companies	96
8	Adeo	96
9	Carrefour	96
10	Lulu Group	94
11	Metro AG	93
12	Fast Retailing	92
13	Rakuten	92
14	Ceconomy	91
15	Walgreens Boots Alliance	90
16	Amazon	90
17	Migros	89
18	Phoenix Group	88
19	H&M	87
20	Expert	84

Rank	Retailer	Experience Score
21	Best Buy	84
22	AS Watson	83
23	Rewe	83
24	Auchan	83
25	Couche-Tard	79
26	Schwarz Group	77
27	Leclerc	77
28	Kingfisher	75
29	Ahold Delhaize	71
30	Cencosud	71
31	Walmart	68
32	Jeronimo Martins	67
33	DM Drogerie Markt	67
34	Lawson	67
35	Costco	66
36	Inditex	65
37	Primark	64
38	Falabella	61
39	Aeon	59
40	Tesco	58
41	P All (7-Eleven Thailand)	55
42	Target	54
43	Sephora (LVMH)	52
44	FamilyMart	52
45	Lululemon	52
46	Seven & I	51
47	Alibaba	50

Curious how your brand compares?

Get a Free Retail Assessment with one of our Internet Performance Monitoring experts.

Retail high rollers: What the rankings reveal

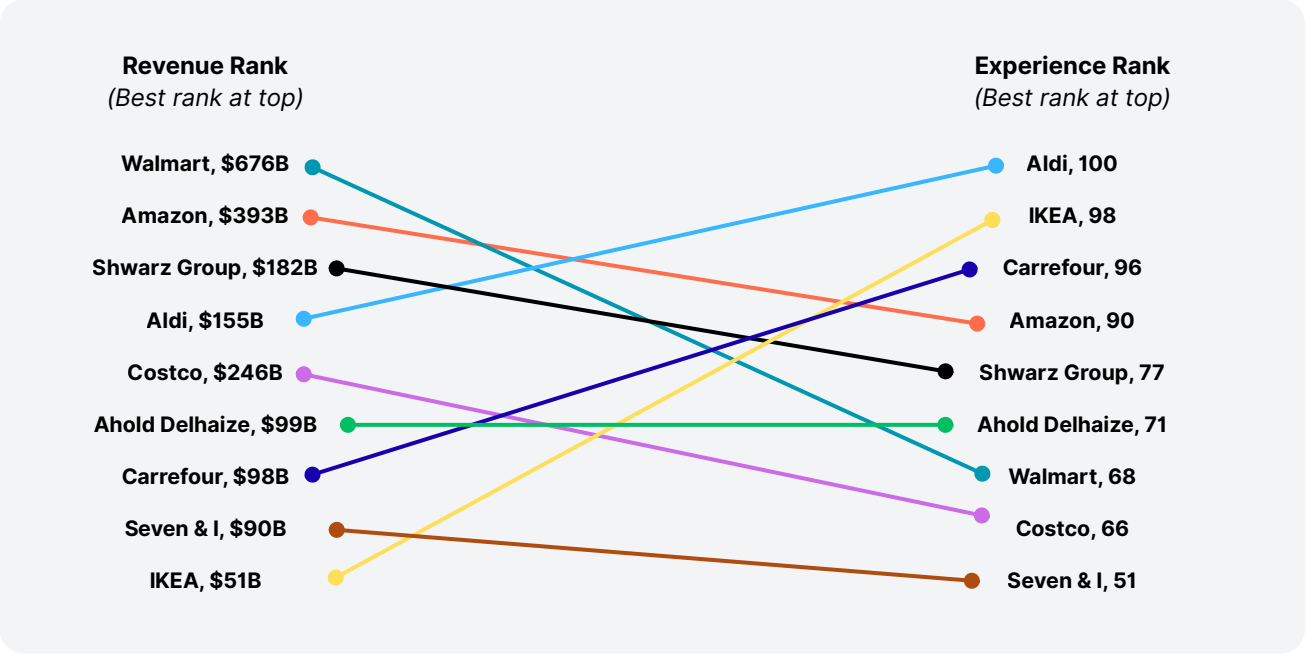
The following takeaways highlight key insights from our analysis of the NRF Top 50 Global Retailers homepages, from what set top performers apart to where others need to improve.
For actionable steps on how banks can improve, including concrete recommendations for tackling front-end optimization, global performance gaps, and experience-centric monitoring — see page 13.

#1 Revenue doesn't guarantee digital experience

Ranking	Retailer	Home country	Total company revenues (billions)	Total worldwide store count
1	Walmart	USA	$676	10,692
2	Amazon.com	USA	$393	605
3	Schwarz Group	Germany	$182	14,244
4	Aldi	Germany	$155	13,877
5	Costco	USA	$246	890
6	Ahold Delhaize	Netherlands	$99	8,111
7	Carrefour	France	$98	14,961
8	Seven & I	Japan	$90	41,128
9	IKEA	Netherlands	$51	489
10	The Home Depot	USA	$155	2,347

The NRF Top 10 Global Retailers 2025

Some of the world's largest retailers underperform on digital experience, while smaller players deliver industry-leading performance. By comparing company revenues from the NRF Top 50 Global Retailers list with our Experience Scores, we see that scale does not guarantee excellence.



The disconnect between scale and experience: A comparison of the NRF top retailers by revenue and their digital experience ranking. Rank axes rescaled to a common range; actual values labeled.

Performance is the great leveller

Several smaller or mid-sized retailers go toe-to-toe with, and even outperform, the industry's largest players

- **Aldi** (#4 revenue, #1 experience) achieves a perfect score of 100.
- **Action** ($15B revenue) ranks #2 with a 99, showing elite performance is possible without massive scale.
- **IKEA** (#9 revenue, #3 experience) dramatically outperforms much larger competitors

Meanwhile, some of the biggest names in retail lag in user experience rankings:

- **Walmart** (#1 revenue, Score 68)
- **Costco** (#5 revenue, Score 66)
- **Seven & I** (#8 revenue, Score 51)

Key takeaway:

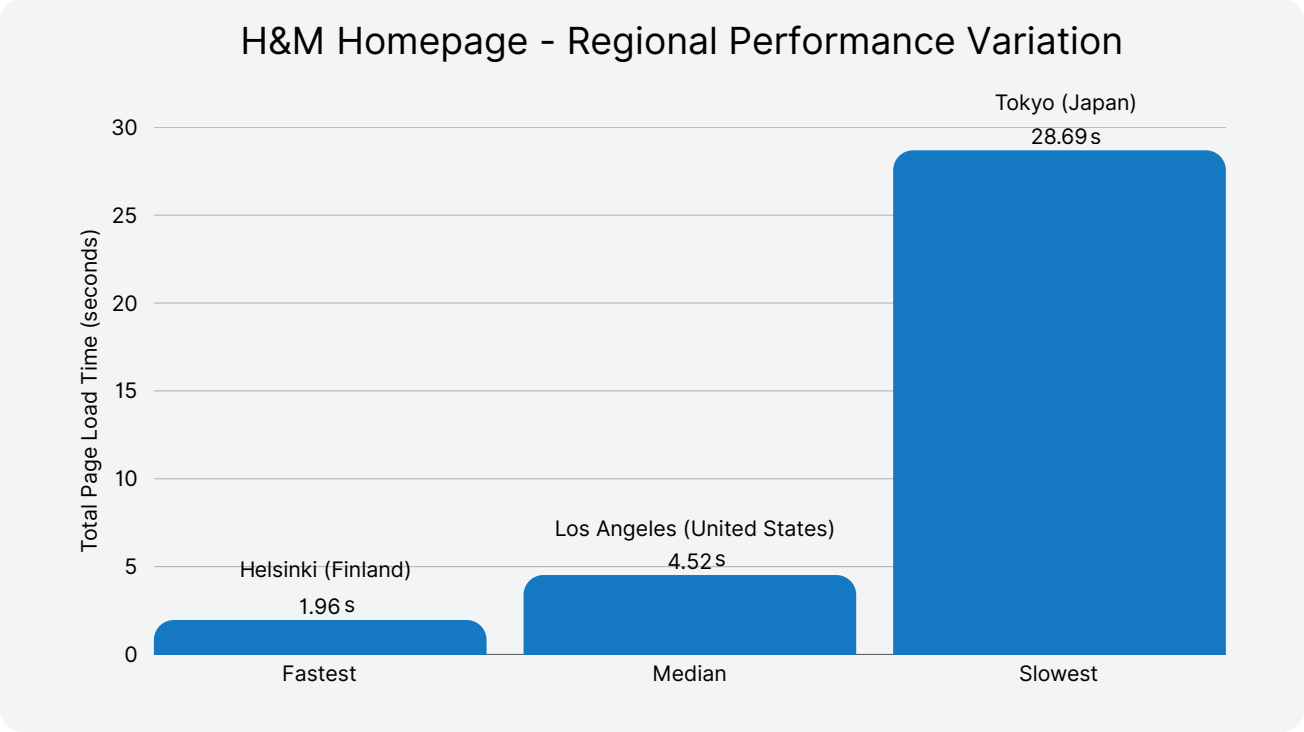
Retailers of any size can win customer loyalty and compete with the biggest brands by investing in speed, reliability, and consistency.

#2 Not all customers see the same web

Identical retail websites deliver fundamentally different experiences depending on where customers access them and how those sites are monitored. Testing the same retailer across multiple locations, ISPs, and network types reveals performance variations that traditional monitoring approaches systematically miss.

For example, in one test:

- **H&M's** homepage loaded in **2.0 seconds** from Helsinki (Backbone, Multihomed) but took **28.7 seconds** from Tokyo (Backbone, KDDI) — a **1,363% difference.**

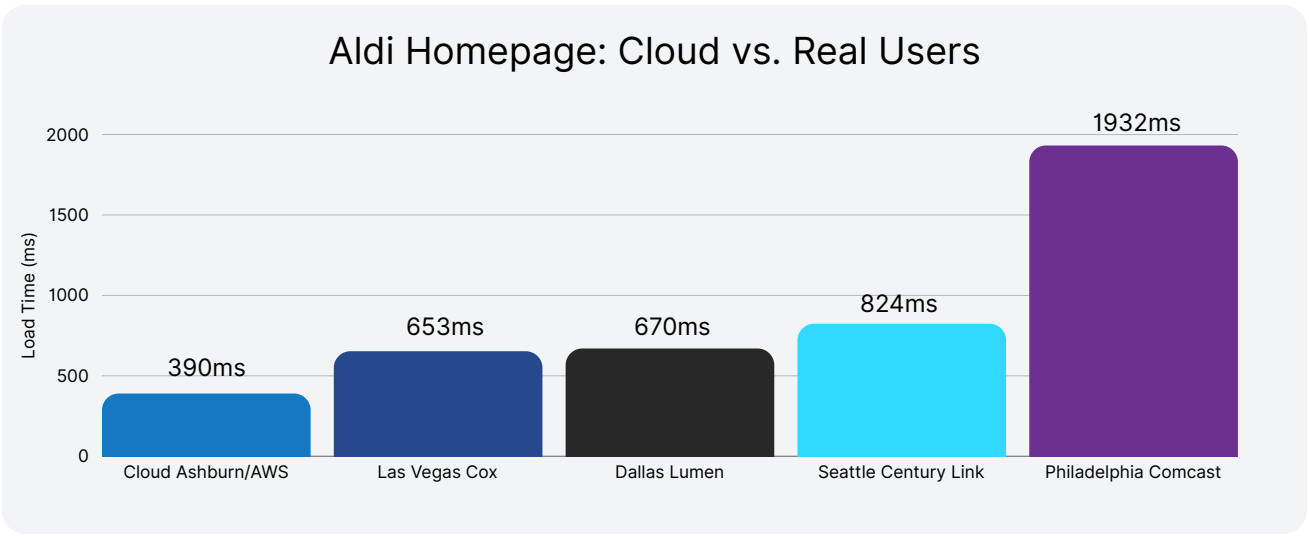


H&M Regional performance variation

Spotlight on Aldi: Single retailer; multiple realities

Aldi's homepage shows a crystal-clear "Cloud vs. Real Users" story. From a U.S. cloud vantage point, it looks like the site loads in under half a second — but real customers wait **2-5× longer** depending on their ISP or access type.

Measured at the same time across diverse vantage points, Aldi's homepage shows just how inconsistent "the same site" can feel.



The Reality Gap:

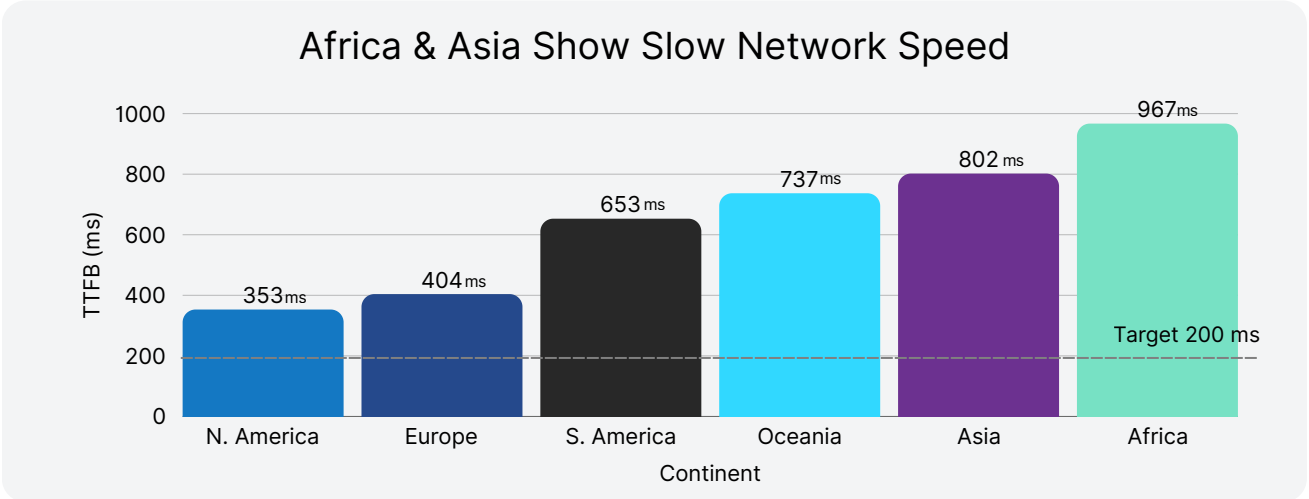
- Cloud monitoring shows Aldi loads in just 350ms - under half a second
- Real customers experience 2-5.5× longer load times depending on their connection

Philadelphia customers wait 1,932ms - nearly 2 full seconds longer than cloud metrics suggest.

Business takeaway:

A retailer seeing strong performance metrics from monitoring in the cloud could be losing substantial revenue in markets where last-mile performance degrades to 2+ seconds — without realizing it. These hidden slowdowns can significantly erode engagement and conversion, especially in mobile-first or emerging markets. Monitoring from the users perspective, across diverse geographies, ISPs, and network types, is the only way to reveal and address these disparities.

Global digital infrastructure gaps



Continental network performance reveals significant disparities, with African users experiencing nearly 3x slower response times than North American users, highlighting global digital infrastructure gaps.

#3 A wide range in web performance

A 50-point performance spread shows big opportunities for improvement.

From **Aldi's** perfect 100 to **Alibaba's** score of 50, the digital performance of top global retailers varies dramatically—despite near-universal uptime.

While a few brands offer seamless, responsive, and stable sites across geographies, **many others struggle to meet even baseline user expectations.** The largest cluster of retailers fell between the mid-60s and low-80s, indicating broad parity with distinct leaders — and clear opportunities for improvement.

Despite 91% of retailers maintaining near-perfect **availability**, that didn't guarantee strong user experience. In fact, **more than a quarter of retailers** scored under 66, indicating experience-level issues such as layout instability, slow rendering, or inconsistent performance across regions.

European retail advantage

European retailers lead global digital performance with an average Experience Score of 82.2, followed by North America at 77.5. Asian retailers significantly underperform at 66.8 despite representing major global brands, while South American retailers score similarly at 66.0.

US retailer mixed results

American retailers show highly variable performance, averaging 77.3. While leaders like **Apple** (96) and **Amazon** (90) excel, major brands including **Walmart** (68) and **Target** (54) underperform expectations given their scale and resources.

#4 What set the top performers apart?

The performance leaders demonstrate that exceptional digital experiences are achievable at global scale. **Aldi** leads the rankings with a perfect 100 score, followed closely by comparatively smaller **Action** (99), **IKEA** (98), and **Euronics International** (97). These top performers share common characteristics:

- Near-perfect availability (99.8-100% uptime)
- Optimized DNS resolution (under 170ms for most)
- Efficient front-end delivery despite varying backend performance
- Minimal layout instability

Notable Achievement:

I**KEA** combines the fastest LCP at just 514ms with excellent overall experience delivery, proving that visual-heavy retail sites can maintain exceptional performance.

#5 Metrics can lie about user experience

One of the most striking discoveries in this benchmark study reveals a fundamental flaw in solely focusing on internal metrics, or traditional monitoring.

Concerningly, **11 retailers delivered poor user experiences (scores below 70) despite excellent traditional metrics:**

Notable Examples:

- **Walmart**: Experience Score 68 despite 119ms TTFB and 99.8% availability
- **Costco**: Experience Score 66 despite 962ms LCP and 99.9% availability
- **Tesco**: Experience Score 58 despite 1,388ms LCP and 99.9% availability

This represents the classic monitoring blind spot where dashboards show green while users suffer. Traditional monitoring misses:

- **Real device performance variations** across different hardware capabilities
- **Network condition impacts** beyond simple connectivity
- **Interactive experience quality** that affects user satisfaction

Quantifying the Gap:

23.4% deliver poor experiences despite good technical metrics

This data validates what many SREs and web performance teams suspect: perfect uptime and fast server response times don't guarantee users aren't struggling with slow, frustrating experiences.

#6 Excellent availability, poor experience

Many retailers maintain near-perfect uptime but still deliver disappointing user experiences. In our benchmark, **16 retailers with ≥99.9% uptime** scored **below 70** on the Digital Experience Score — including major brands like **Walmart**, **Target**, and **Tesco**.

This reinforces a critical insight:

“Being online” no longer means your users are having a good experience.

Even among those with sub-benchmark availability, user experience impact varied widely:

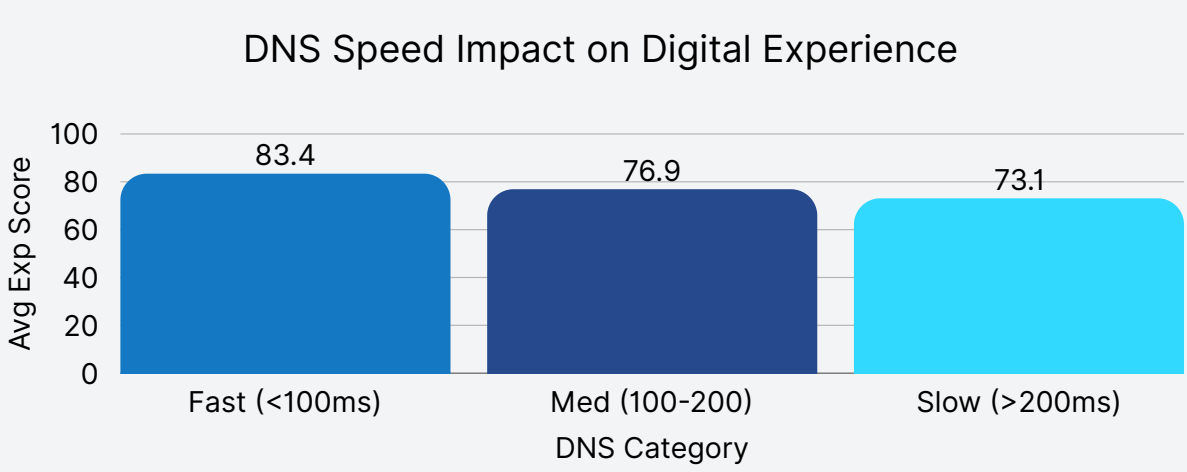
Notable availability gaps during testing period	
Test	% Availability
Auchan Homepage	93
Expert Homepage	94
Aspiag Homepage	95
H&M Homepage	97
Jeronimo Martins Homepage	99

Yet interestingly: Aspiag still scored 97 on experience — suggesting that even with availability dips, perceived performance can remain strong when the front-end is optimized.

Key takeaway:

Uptime is table stakes — but what users see, feel, and interact with matters more. Retailers must monitor what users experience, not just whether systems are "up."

#7 Slower DNS = weaker experience



Bar chart showing how DNS response time impacts digital experience scores across retail companies.

DNS drags you down: Retailers with DNS under **100 ms** score roughly 10 points higher on digital experience than those over **200 ms**, showing that even small network delays can erode user satisfaction.

- Top-performing retailers consistently kept DNS times **under 170ms**
- Retailers with DNS times above **300ms** were almost entirely clustered below a score of 75
- The worst DNS performers (approaching 500ms) all landed in the bottom quartile for experience

Key takeaway:

Optimizing DNS resolution is one of the simplest ways to boost perceived speed and experience. Yet many retailers are still lagging behind, with **200x variability** in performance across the dataset.

Recommendations for Improving Web Performance

With the global retail digital transformation market expanding at 17.6% CAGR to reach $1.04 trillion by 2032, performance laggards' risk being systematically excluded from the digital economy's growth trajectory. Market share isn't just shifting; it's being permanently redistributed based on digital experience quality.

The following recommendations outline where to focus resources to close experience gaps, improve operational resilience, and position your brand to win in an increasingly competitive digital retail landscape.

1 Deliver a fast, consistent experience everywhere

The top-ranked retailers, including **Aldi, Action,** and **IKEA**, delivered near-perfect uptime and fast load times across geographies. They show that excellent performance at global scale is achievable.

- Track all 8-core metrics equally. No single "hero metric" guarantees experience.
- Target ≥99.9% availability and <3 second document complete times.
- Eliminate weak points in front-end delivery, server responsiveness, and layout stability.

Even visual-heavy sites like IKEA demonstrated how speed and reliability can coexist through smart optimization.

2 Shift from availability-only monitoring to Experience Level Objectives (XLOs)

Most retailers have strong uptime — but that doesn't mean users are having a good experience.

- XLOs capture what real users feel, not just whether systems are up.
- Monitor from where users actually are: regional ISPs, mobile networks, and backbone nodes.
- If SLOs say "we're online," XLOs ask: is the experience usable and fast?

This outside-in approach is key to identifying blind spots that traditional monitoring misses.

3 Optimize for global reach, not just local performance

Retailers with strong domestic infrastructure often underperform internationally — especially in **Asia**, **Africa**, and **South America**.

- Deploy Anycast DNS and globally distributed CDNs.
- Leverage Internet Performance Monitoring from global intelligent agents. .
- Prioritize DNS optimization: retailers with DNS >300ms averaged 4 points lower in experience scores.

Global shoppers expect the same seamless experience regardless of geography.

4 Prioritize Front-End Optimization

Even with perfect backend infrastructure, **slow, unstable front-ends** can destroy user satisfaction.

- Fix layout shifts (CLS) before speed optimizations
- Target LCP ≤2.0s to meet user expectations
- Compress images, defer non-critical assets, and streamline the DOM
- Audit and manage third-party scripts, which often bloat and block performance

Top scorers like **Carrefour** and **TJX** performed well despite backend limitations, thanks to strong frontend strategies.

5 Treat TTFB as a leading indicator of experience

Time to First Byte (TTFB) reveals backend bottlenecks that cascade through the experience.

- Continuously monitor TTFB from multiple global regions.
- Investigate high TTFB sites (>500ms) — they often correlate with poor rankings.
- Optimize origin infrastructure and caching layers to reduce server wait times

Metro AG and **Carrefour** scored highly despite elevated TTFB, but that's the exception, not the rule.

6 Monitor APIs as mission-critical infrastructure

Retail sites rely on APIs for cart logic, personalization, and inventory. Poor-performing APIs silently degrade UX.

- Monitor both internal and third-party APIs for latency, errors, and availability.
- Measure from real user regions, not just centralized cloud agents.
- Identify dependency bottlenecks that impact page load and interactivity.

API failures often show up as slow UI — not as outright downtime.

7 Benchmark and monitor CDNs for real-world delivery

Not all CDNs perform equally across ISPs and geographies. CDN misalignment creates invisible friction.

- Continuously test CDN performance across last-mile and mobile networks.
- Re-evaluate vendor performance in underserved regions.
- Consider multi-CDN strategies to improve failover and regional delivery.

Many low-scoring retailers showed elevated load times in Asia and South America despite using a CDN.

8 Benchmark continuously and learn from leaders

Performance is never static — especially in retail. Peak events like **Black Friday** test real-world resilience.

- Track experience scores over time, not just point-in-time metrics.
- Benchmark against competitors and your own historical baselines.
- Run synthetic tests that simulate holiday traffic and peak demand conditions.

Small optimizations can elevate mid-tier performers into the top quartile.

9 Monitor from where users actually are to close regional performance gaps

Measuring performance only from cloud locations can miss major slowdowns that customers experience in specific regions or on certain ISPs.

- Include vantage points on regional ISPs, mobile networks, and backbone nodes.
- Compare backbone and last-mile results to identify performance gaps hidden by traditional monitoring.
- Test from multiple geographies to capture real-world variation — even within the same country.

Regional latency gaps are solvable, but only if teams can see them.

10 Make performance a cultural priority

The retailers delivering the best experiences aren't just using better tools — they've made **digital performance a strategic priority.**

- Set org-wide KPIs for experience, not just uptime.
- Form dedicated performance engineering teams.
- Include performance as a core input to product and design decisions.

In modern retail, **performance is product** — and it's the first impression users remember.

Testing methodology

This benchmark evaluated companies from the NRF Top 50 Global Retailers 2025 list, ensuring unbiased representation of the world's largest and most influential retail brands.

Timeframe

All data was collected between **July 14 and August 1, 2025**, providing a consistent 3-week snapshot of real-world performance across all monitored sites.

Monitored Pages

We tested the **public homepages** of each retailer — the first touchpoint for most shoppers. This allowed for standardized comparisons across brands, capturing performance as experienced by a typical visitor.

Testing Locations

Tests were conducted from 123 global monitoring locations across six continents:

- 26 North American agents
- 97 international agents, including the UK, Germany, India, Japan, Australia, South Africa, and Brazil

This approach enabled us to capture both global averages and regional disparities in performance.

Ranking methodology

Retailers in this report are ranked using the **Catchpoint Digital Experience Score** — a holistic, user-centric measurement designed to reflect what customers actually experience when interacting with a website.

What is the Digital Experience Score?

Built to reflect the **full picture of system health**, the Digital Experience Score combines endpoint, network, and application insights into a single, field-proven number between 0 and 100.

This metric cuts through complexity to provide a **clear, reliable signal** of how your customers (or employees) are experiencing your services — and where performance might be breaking down.

How the score is calculated

The score aggregates three key dimensions:

- **Endpoint score** – Measures end-user device performance (e.g., CPU, memory constraints)
- **Network score** – Evaluates network quality using packet loss, latency, and round-trip time
- **Application score** – Assesses app performance via load times, layout stability (CLS), responsiveness, and error rates

Together, these scores create a **comprehensive and actionable view** of user experience quality — one that traditional uptime and infrastructure metrics alone can't deliver.

Read our guide for a deeper dive into the Digital Experience Score and how it's calculated.

Metrics tested

In addition to the Catchpoint Digital Experience Score, we captured performance across eight core technical metrics.

Metric	Definition
Availability	Uptime percentage
Document Complete	Time until all key page elements are loaded
Page Load Time	Time until entire page is fully loaded
Response Time	Time to complete a full request
Time to First Byte (TTFB)	Time to receive first byte from server
Largest Contentful Paint	Time to load main content block
Cumulative Layout Shift (CLS)	Visual layout movement during load
DNS Lookup Time	Time to resolve domain to IP address

About Catchpoint

Trusted by the world's leading brands who understand in the digital age performance is paramount, Catchpoint is dedicated to monitoring what matters from where it matters to catch issues across the Internet Stack before they impact business.

The Catchpoint Platform offers a comprehensive suite of Internet Performance Monitoring(IPM) capabilities, including Internet Synthetics, RUM, BGP, Tracing, performance optimization, and advanced analytics, all supported by high-fidelity data and flexible visualizations. Leveraging thousands of global vantage points inside the critical systems that make the Internet work, Catchpoint provides unparalleled visibility into what affects customer experiences, workforce efficiency, network performance, websites, applications, and APIs.

Today's digital world requires resilience and exceptional performance, which is why *The Internet Relies on Catchpoint*.

Learn more about IPM for Retail

Curious how your brand compares?

Get a Free Retail Assessment with one of our IPM experts.