E-Commerce Modernization: How UX Refactoring and Technical SEO drove +70% Traffic for Cartepedia.ro

CASE STUDY

Industry: Books E-commerce
**Period:** April-September 2025

INTRODUCTION

Cartepedia.ro is one of Romania's leading online bookstores, offering tens of thousands of titles and fast nationwide delivery. Over time, the platform became a **trusted destination for readers.** However, its website design had remained unchanged for more than five years, during which user expectations and e-commerce standards evolved significantly. The outdated interface limited the browsing experience and left opportunities for **conversion and customer retention** untapped.

To stay competitive and provide a smoother, more inspiring shopping journey, Cartepedia required a UX-driven redesign built around current best practices in online retail — focused on **clarity, trust, and usability** across every step of the customer journey.

OPTI worked on the basis of recommendations provided by a digital agency, refining the UX and SEO in several feedback loops. Results after 90 days include +**20% conversion rate and +70% Google search clicks and impressions**.
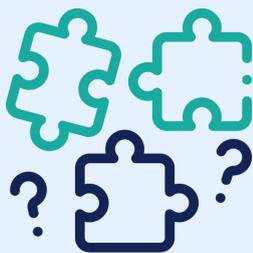
CHALLENGES

As Cartepedia prepared to modernize its online store and align with current UX and CRO (Conversion Rate Optimization) standards, four key challenges emerged:

1. Technical Debt & UX Friction

Over five years of legacy code resulted in **slow load times and a rigid interface**. The navigation and visual hierarchy was inconsistent with today's e-commerce standards, but more importantly, technical debt was a break on growth.

2. Conversion Barriers

Essential pages - Home, Product, Cart & Checkout - **lacked clear CTAs, transparent delivery info, and optimized flows,** resulting in stagnating conversion rates.

3. Retention and Re-Engagement Opportunity

Returning customers had limited incentives, without a strong Account zone and personalized recommendations.

4. Lack of Self-Service Features

Users couldn't easily access order history, invoice downloads, or delivery status, leading to **unnecessary support requests** and reduced loyalty.

SOLUTION
FROM AUDIT TO RESULTS

We delivered a redesign built for trust, top speed optimizations and a clear shopping experience.

1. Home Page and AI-Ready Search

✓ A new homepage with a **clear hero banner, themed shelves, and personalized recommendations,** designed to support both quick search and inspirational browsing.
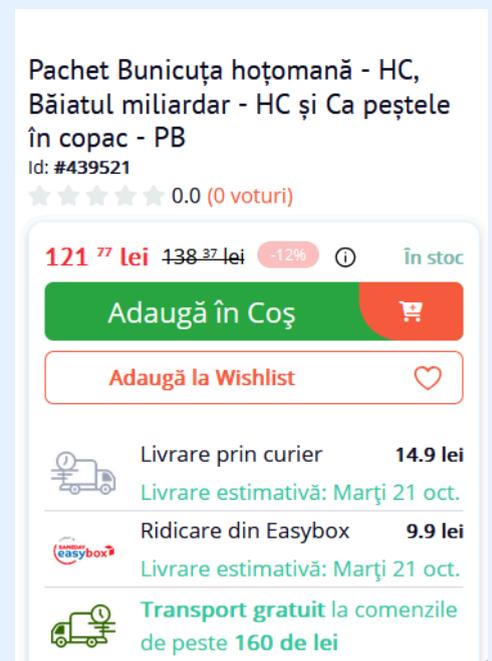
✓ **Implemented Sphinx Search Server** with semantic features for quick results and relevance. Simultaneously, we integrated **Google Gemini** into the backend architecture for features like conversational AI (chatbot).
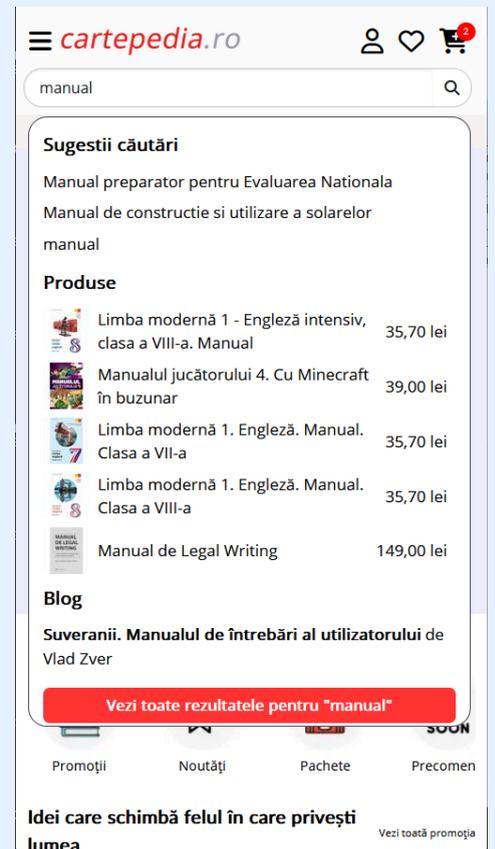
2. Performance-First Product Pages

✓ Rebuilt the UX with clear prices, large CTAs, transparent delivery info, rich content (descriptions, reviews), and **smart cross-sells** (*Frequently Bought Together, Recommended for You*). Also rewrote technically to achieve a **LCP of 0.5s**, for SEO dominance.

cartepedia.ro

manual

Sugestii căutări

Manual preparator pentru Evaluarea Nationala
Manual de constructie si utilizare a solarelor
manual

Produse

Limba modernă 1 - Engleză intensiv, clasa a VIII-a. Manual — 35,70 lei
Manualul jucătorului 4. Cu Minecraft în buzunar — 39,00 lei
Limba modernă 1. Engleză. Manual. Clasa a VII-a — 35,70 lei
Limba modernă 1. Engleză. Manual. Clasa a VIII-a — 35,70 lei
Manual de Legal Writing — 149,00 lei

Blog

Suveranii. Manualul de întrebări al utilizatorului de Vlad Zver

Vezi toate rezultatele pentru "manual"

Promoții   Noutăți   Pachete   Precomen

Idei care schimbă felul în care privești lumea
Vezi toată promoția

Pachet Bunicuța hoțomană - HC, Băiatul miliardar - HC și Ca peștele în copac - PB
Id: #439521

0.0 (0 voturi)

121 77 lei 138 37 lei -12% ⓘ în stoc

Adaugă în Coş

Adaugă la Wishlist

Livrare prin curier — 14.9 lei
Livrare estimativă: Marţi 21 oct.
Ridicare din Easybox — 9.9 lei
Livrare estimativă: Marţi 21 oct.
Transport gratuit la comenzile de peste **160 de lei**

3. Simplified Cart & Checkout

✅ Streamlined flow with editable cart, visible totals, guest checkout, easy forms, and transparent payment options. Designed for **fewer steps and greater trust**.

4. New User Account Area

✅ Introduced *My Account* with order history, tracking, billing/shipping details, and invoice downloads — boosting self-service and retention.
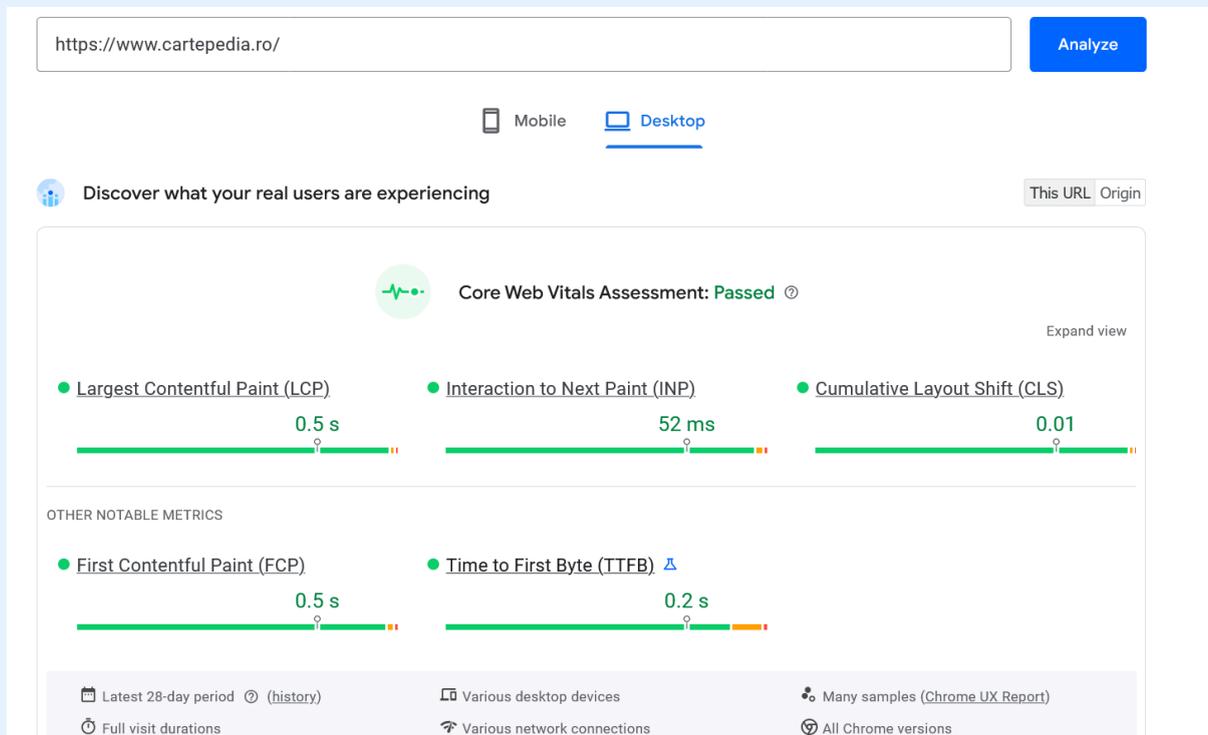
TECH AND METHODOLOGY

Services: UX/UI Design, Front-end Dev, Technical SEO.

Tech: PHP, Yii Framework, Sphinx Search Server, MySQL, CloudFlare, Postmark, Google Gemini, Google Analytics, Search Console, Sentry, Bugbug, Pagespeed

Standards: ISO 9001 (quality), ISO 27001 (information security), Core Web Vitals.

Proof of Engineering: Achieving a **0.5s Largest Contentful Paint (LCP)** moved the site into the top tier of Core Web Vitals, triggering the organic traffic surge.

A WORD FROM THE TEAM

"We refactored a decade of legacy code into a unified base. It massively reduces technical debt, cut page load times in half and laid the groundwork for the new AI features such as chatbots." **— Lucian Cârlogea, Lead Software Engineer**

RESULTS
(AFTER 90 DAYS)

Navigation Speed

Users can browse and purchase faster. Through legacy refactoring and infrastructure upgrades, page load times were cut in half, achieving an **LCP of 0.5s**

Trust Signals and SEO Growth

Transparent pricing, delivery info, and cross-sells increased confidence. The re-indexing in Google Search **grew impressions and clicks by 70%.**

Higher Conversion

A simplified process reduced friction and **boosted conversions by ~20%** (90 day comparison).

Longer Sessions

The new account area and personalized recommendations led to a simultaneous increase in **engagement.**

TESTIMONIAL

cartepedia.ro

"OPTI have been our technological partners, from writing the software specs, developing the web store, going live, and project maintenance since the launch. We recommend them for any e-commerce project." — ***Cartepedia.ro***
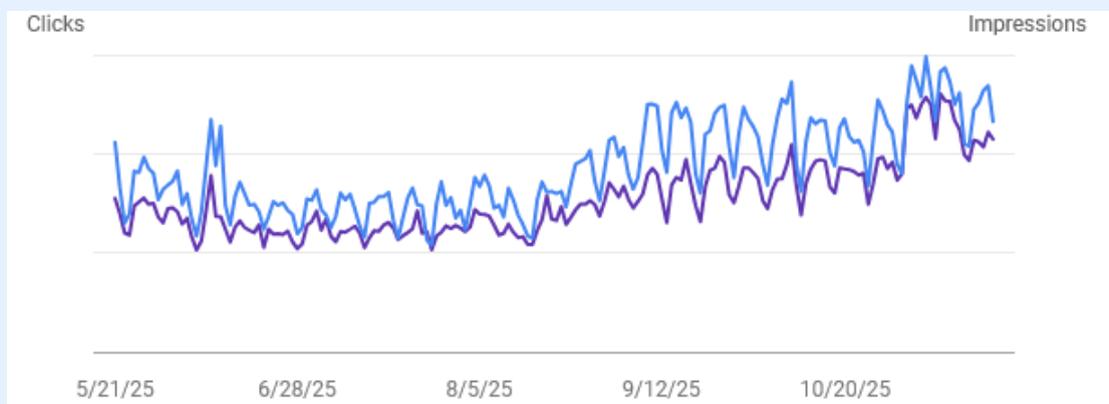
Want an online store that converts **more visitors into loyal customers**? **Let's talk** ➔
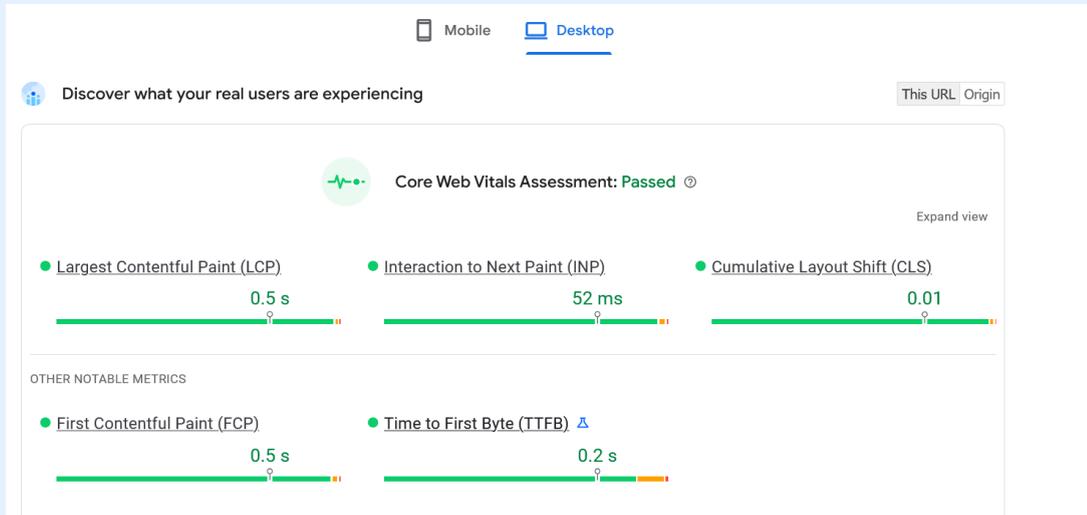
PageSpeed Insight – Cartepedia.ro - LCP at 0.5s
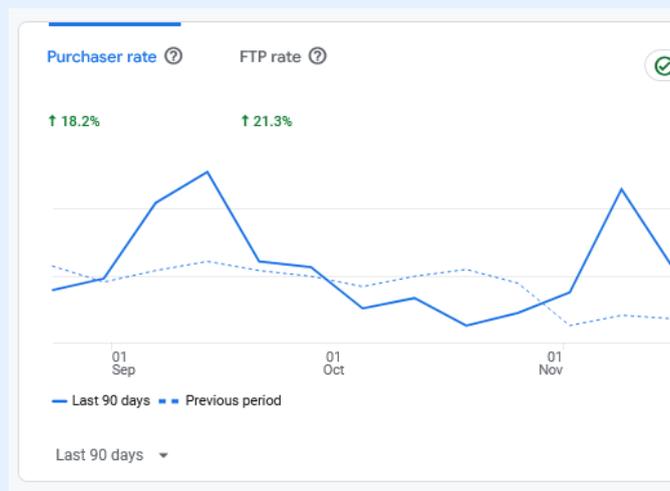
Google Analytics – Scale-up: the Purchaser rate and the First Time Buyer Rate increased by ~20%

Google Search Console – Clicks and impressions grew by ~70% compared to the three months before

CONTACT US

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READ MORE

⇒ Read on **AI-Ready Infrastructure for Web, Email and Sales** - case study covering Cartepedia.ro's 2025 infrastructure update

⇒ Discover the **AI Sales Platform** ➤ for large ERP catalogs and multi-channel sales

⇒ See our **eCommerce services and expertise** ➤

⇒ See our **Software Development Hub** ➤

OPTI Software

Intelligent Business Processes. Scalable Results.

OPTI builds software, AI agents, and HubSpot integrations on Google Cloud - with DevOps and ISO 27001 certifications.

Founded in 2005, OPTI has a team of senior analysts and programmers, is a HubSpot Solution Partner, Google Cloud Partner and certified in more technological stacks.

CERTIFICATIONS

HubSpot Partner — SOLUTIONS PARTNER PROGRAM · Google Workspace Administrator — GOOGLE CERTIFIED - PROFESSIONAL · ISO 9001 CERTIFIED · ISO 27001 CERTIFIED · Google Cloud Partner

Microsoft CERTIFICATION CRM · Microsoft CERTIFICATION ERP · REVIEWED ON Clutch ★★★★★ 5/5 RATING

KNOW-HOW

Frameworks & Languages	JS JavaScript	php PHP	Python	Java
	Rust	C#	React	Angular
	Typescript	HTML5		
Databases	PostgreSQL	Microsoft SQL Server	BigQuery	
	Mongo	MySQL	Hadoop	
ERP/CRMs	HubSpot	Salesforce	FreshSales	Microsoft Dynamics 365
	Zoho	Pipedrive	Zendesk	MiniCRM
Server Configuration	Linux OS	Load Balancers	HTTP Daemons	