



Strategic Case Studies

COMPETITIVE CONQUEST | EDITORIAL ENGINE | STAKEHOLDER
MANAGEMENT

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Strategic Case Study

Competitive Displacement &
Topical Moat Construction

Kristina Lichtenwald

SEO STRATEGIST & DATA ENGINEER

FOCUS: TOPICAL AUTHORITY, SEMANTIC GAP ANALYSIS, INTERNAL
LINK ENGINEERING

The Challenge:

A legacy market leader held the #1 ranking for a primary high-intent industry keyword for over three years, relying on brand history rather than modern semantic depth.

The Objective:

Displace the incumbent and establish a sustainable “Topical Moat” that prevents counter-optimization.

The “Zero-Waste” Approach

Step 1: Semantic Mapping

Performed a gap analysis of the top 10 competitors to identify 15 specific “micro-intents” (e.g., specific operational pain points) that the market leader had neglected.

Step 2: Hub-and-Spoke Architecture

Architected a central Master Guide supported by 20 high-intent “spoke” articles.

Why Hub-and-Spoke?

It consolidates authority and reduces the need for expensive external backlink acquisition.

Step 3: Authority Funneling

Engineered an internal linking strategy that funneled 100% of the spoke’s link equity into the central hub, signaling massive topical relevance to search algorithms.



Technical Execution

Entity Density

Leveraged NLP tools to map industry entities against the competitor. We achieved a 20% higher entity density for core concepts, proving “Information Gain” to Google’s E-E-A-T signals.

Crawl Efficiency

Optimized the internal pathing so that bots could discover the entire 21-page “Moat” within two clicks of the homepage.

Results & Business Impact

Market Leadership

Secured the #1 ranking for the primary target keyword within five months.

Efficiency

Increased the overall site Share of Voice (SoV) by 25%.

ROI

Secured an organic position with an estimated PPC equivalency value of \$20,000+ per month.

This and the other case studies represent Technical Proofs of Concept designed to demonstrate high-level SEO architecture, Python-driven automation, and advanced data modeling.

While the brand names and specific datasets are simulated to protect proprietary methodologies, each scenario is built on real-world logic, live SERP data, and enterprise-level growth frameworks. These case studies serve as a sandbox for testing zero-waste efficiency before deployment in live production environments.

None of the solutions of the case studies are “off the shelf.” They are custom-built to eliminate waste and demonstrate some of my knowledge.



Strategic Case Study

Engineering a High-Velocity
Editorial Engine: Automation,
QA, & Schema at Scale

Kristina Lichtenwald

SEO STRATEGIST & DATA ENGINEER

FOCUS: WORKFLOW AUTOMATION, JSON-LD SCHEMA, TECHNICAL
QA, CONTENT VELOCITY

The Challenge:

A high-volume B2B content strategy was suffering from manual bottlenecks, inconsistent metadata application, and slow "time-to-index," leading to missed organic opportunities.

The Objective:

Build an automated pipeline that increases publication speed while ensuring 100% technical SEO compliance across every URL.

The "Zero-Waste" Approach

Step 1: Automated SEO Briefing

Transitioned from manual research to a Python-assisted briefing process. This integrated keyword clusters, NLP entities, and internal linking targets into a single "Source of Truth" for writers.

Step 2: Technical Guardrails

Implemented automated QA checks (the "Editorial Gatekeeper") using Gumloop/Python to validate headers, image alt-text, and link health before staging.

Step 3: Dynamic Schema Injection

Engineered a scalable JSON-LD Schema generator to automatically inject Article, FAQ, and Breadcrumb markup, ensuring maximum visibility in Google Rich Results.

Metric	Legacy Process	Engineered Workflow
Review Turnaround	5 Days	4 Hours
Monthly Output	8 Articles	22 Articles
SEO Success Rate	Reactive/Patchy	100% "Born Optimized"

The "No-Touch" Technical QA Flow – from Brief Generation to Schema Validation

Technical Execution

API Integration

Utilized the Search Console API to trigger "Instant Indexing" requests for newly published high-priority spokes, reducing crawl latency.

Entity Optimization

Cross-referenced content against MarketMuse/Clearscope data via automated scripts to ensure every article hit a "Competitive Content Score" before the first draft was even finished.

Results & Business Impact

Velocity

Increased publication output by 40% (matching your management table stats) without adding additional headcount.

Integrity

Achieved a 0% error rate in Schema validation across all newly published assets.

Search Presence

Rapidly expanded the site's "Topical Footprint," resulting in a significant lift in non-branded organic impressions within the first 60 days.

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Strategic Case Study

Governance, Cross-Functional
Alignment, & Stakeholder
Reporting

Kristina Lichtenwald

SEO STRATEGIST & DATA ENGINEER

FOCUS: OPERATIONAL EFFICIENCY, AGILE WORKFLOWS, EXECUTIVE
ATTRIBUTION

The Challenge:

Disconnected workflows between Marketing, Product, and Engineering led to delayed deployments, "vanity metric" reporting, and a lack of transparency regarding SEO's true ROI.

The Objective:

Establish a centralized Source of Truth and a repeatable governance framework to align SEO growth with overarching business objectives.

The "Zero-Waste" Approach

Step 1: Workflow Engineering

Integrated SEO requirements directly into Jira and Agile sprints. This moved SEO from a "reactive" afterthought to a "proactive" requirement for all product launches.

Step 2: The SOP Vault

Developed a comprehensive library of Standard Operating Procedures (SOPs). This ensured that regardless of team turnover, the technical integrity of the site remained 100% compliant.

Step 3: Executive Education

Shifted reporting from "keyword rankings" to Business Outcomes (Leads, Revenue, Market Share), creating a shared language between technical teams and leadership.

Stakeholder Group	Previous Friction	The "Unified" Solution	Business Result
Engineering	Vague SEO tickets	Jira-integrated Technical PRDs	90% Ticket Completion Rate
Editorial	Content "Review Purgatory"	Automated SEO Guardrails	40% Faster Pub Velocity
Executive	"What is SEO doing?"	Custom Revenue Attribution Dashboard	Clear ROI Correlation

Technical Execution

Agile/Kanban Implementation

Utilized Notion and Asana to visualize project velocity. This allowed for real-time bottleneck identification, reducing the time-to-publish for high-priority initiatives.

Data Validation

Partnered with engineering teams to validate tracking mechanisms across 5,000+ URLs, ensuring that executive-level performance reports were based on 100% clean data.

Results & Business Impact

Transparency

Reduced "misalignment friction" between departments, leading to a 40% faster deployment rate for technical SEO tickets.

Attribution

Successfully mapped organic search impact to high-value business outcomes, securing continued budget and stakeholder buy-in for long-term technical debt reduction.

Scalability

Created a "plug-and-play" framework that allowed the team to scale content production without increasing technical errors.

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