

Leading Home Improvement Retailer Achieves 22% Uplift in Content Quality with DataWeave's AI-Powered Content Optimization

Company and Industry Profile

Automotive

A leading name in home improvement retail, the company has built a strong market position by serving both DIY consumers and professional customers through a robust omnichannel model. With a deep assortment spanning home décor, appliances, tools, building materials, and seasonal products, the retailer continues to invest heavily in digital innovation to stay competitive in a price-sensitive market.



Industry:
Home Improvement & Building Materials Retail



Annual Revenue:
\$85B+



Headquarters:
US

As digital discovery, search relevance, and product comparison become more automated and AI-driven, the retailer prioritized data-backed decision-making to improve digital shelf readiness, product discoverability, and conversion performance at scale.

The Challenge

Operating at a massive scale, the retailer faced a growing challenge of maintaining high-quality, consistent, and search-ready product content across a six-figure SKU catalog spanning highly diverse categories. While content standards existed, enforcing them consistently across categories, suppliers, and frequent updates became increasingly complex.

Key challenges included:

- Inconsistent titles, descriptions, and attributes across thousands of SKUs, impacting discoverability and shopper trust
- Poor attribute health with missing or incomplete specifications across critical categories
- Limited visibility into how content quality compared against competitors at the SKU and category level
- Manual, resource-intensive processes that could not keep pace with catalog growth and assortment changes
- Difficulty prioritizing which SKUs and attributes to fix first for maximum business impact

Partnership With DataWeave

The retailer partnered with DataWeave to deploy an AI-powered content optimization solution designed to systematically improve content health, attribute completeness, and digital shelf readiness.

Rather than treating content optimization as a one-time cleanup exercise, the solution enabled continuous monitoring, prioritization, and improvement across the catalog.

Implementation Scope:

DataWeave's content optimization solution was implemented to:

- Monitor and optimize content for **100,000+ SKUs** across the retailer's digital catalog
- Benchmark content quality and attribute health against **five major competitors** in the home improvement space
- Generate AI-driven recommendations for title optimization, keyword enhancement, and attribute enrichment
- Identify content gaps and missing attributes that directly impact discoverability and search performance
- Enable ongoing SKU-level and PDP-level readiness tracking
- Deliver attribute-level readiness reports showing current versus recommended values

Solution Deployment & Strategic Impact

Scale and Coverage

- Analyzed SKUs across diverse categories, including Air Filters, Accent Cabinets, Rugs, and dozens of other segments
- Benchmarked content against big-box and specialty competitors
- Tracked performance across both high-consideration products and everyday building materials

AI-Powered Content Intelligence

PDP Elements	Current Value	Recommended Value		Approve All
Title	Flanders 25 in. W x 240 in. H x 1 in. D Latex 4 MERV Air Conditioner Filter 1 pk	25-in x 240-in x 1-in MERV 4 Latex Air Conditioner Filter	ⓘ	 
Marketing Copy	Permaire Media Rolls are naturally rigid. Once cut to the proper dimensions, they are complete filters ready to install, no frame required. As dust particles pass through the filtration media, they become naturally charged and are attracted to the opposite charge on the filter fibers. Show More	Upgrade your residential HVAC system with this high-performance Permaire Media Roll Filter. Designed to effectively capture pollen, household dust, debris, and lint, this filter significantly improves your indoor air quality. The non-washable media roll ensures consistent filtration efficiency throughout its lifespan. By trapping a wide range of airborne particles, this filter helps create a cleaner, healthier living environment. Ideal for homeowners who prioritize air quality and want to maintain their HVAC system's performance. Install this Permaire Media Roll Filter to breathe easier and enjoy cleaner air in your home.	ⓘ	 
Bullet Points	<ul style="list-style-type: none"> Durable synthetic, self-supporting media roll innovative replacement media offers longer service life and better structural integrity with no frame required. Available in half inch one and two inch media thickness. Washable and reusable. 	<ul style="list-style-type: none"> Washable for easy maintenance and long-lasting cleanliness Made of durable synthetic material for enhanced longevity Available in 0.5-inch, 1-inch, and 2-inch thicknesses to suit various needs Ideal for residential and commercial carpet installations Provides comfort underfoot and extends carpet life 	ⓘ	 
Documents	-	-		

The platform applied natural language processing and vision models to deliver:

- Automated **attribute health scoring** based on completeness, accuracy, and category-specific best practices
- SKU readiness and **PDP readiness** scores to help teams prioritize fixes at scale
- AI-generated recommendations** for titles, bullets, and marketing copy
- Attribute-specific recommended values for missing or incomplete specifications, including dimensions, materials, compatibility, and technical features
- Smart keyword extraction and placement recommendations informed by competitive and search trends

Measurable Content Quality and Attribute Health Improvements

Product Information	Category	Updated On	Competitor Insights	Issues	
  Flanders 25 in. W X 240 in. H X 1 in. D Latex 4 MERV Air Conditioner Filter 1 pk 7386277	Air Filters	16 Dec'25 05:20 pm		0	Optimize
  Christopher Knight Home Latimer Mid-Century Modern Handcrafted Mango Wood 3 Drawer Sideboard with 2 Doors-Natural 6926312	Accent Cabinets	16 Dec'25 05:05 pm		9	Optimize
  Nourison Textured Home Geometric 5'3" x 7' Beige Ivory Indoor Area Rug 7388602	Rugs	18 Nov'25 02:55 pm		14	Optimize
  Nourison Tulum 5'3" x 7' Olive Indoor/Outdoor Rug 7388316	Rugs	17 Nov'25 05:28 pm		20	Optimize
  GAURI KOHLI Nasik Rug 6912601	Rugs	14 Nov'25 07:46 pm		0	Optimize

- Achieved approximately 22% overall content quality uplift across more than 100,000 SKUs. The uplift was defined as the percentage of missing attributes filled using DataWeave-recommended values.
- Improved attribute coverage across critical specifications including dimensions, materials, compatibility, and technical details
- Enhanced keyword density and placement to support organic discoverability
- Delivered detailed readiness reports highlighting attribute-by-attribute gaps between current and recommended content

Competitive Content Intelligence and Continuous Monitoring

 Flanders 25 in. W X 240 in. H X 1 in. D Latex 4 MERV Air Conditioner Filter 1 pk 7386277	Air Filters	16 Dec'25 05:20 pm	45	44	1/45	0	1	Review
 Christopher Knight Home Latimer Mid-Century Modern Handcrafted Mango Wood 3 Drawer Sideboard with 2 Doors-Natural 6926312	Accent Cabinets	16 Dec'25 05:05 pm	32	11	21/32	5	63	Review
 Nourison Textured Home Geometric 5'3" x 7' Beige Ivory Indoor Area Rug 7388602	Rugs	18 Nov'25 02:55 pm	71	32	39/71	25	53	Review
 Nourison Tulum 5'3" x 7' Olive Indoor/Outdoor Rug 7388316	Rugs	17 Nov'25 05:28 pm	71	30	41/71	26	55	Review
 GAURI KOHLI Nasik Rug 6912601	Rugs	14 Nov'25 07:46 pm	71	60	11/71	0	15	Review

The solution enabled the retailer to:

- Gain clear visibility into attribute completeness across the entire catalog
- Benchmark content quality against competitors at both SKU and category levels
- Identify where competitors had better-optimized listings for specific products
- Track issues over time, measure the impact of content updates, and continuously surface new optimization opportunities as the market evolved

Business Impact

By integrating DataWeave's AI-powered content optimization solution, the retailer was able to:

- **Achieve a 22% uplift in content quality** across a six-figure SKU catalog
- **Improve product discoverability** through optimized titles, keyword-rich descriptions, and stronger attribute coverage
- **Scale content quality improvements** without proportional increases in manual effort
- **Make data-driven content decisions** backed by competitive benchmarks and readiness scoring
- **Enhance shopper experience** with more accurate, complete, and decision-ready product information
- **Support stronger search performance** through structured, optimized content aligned with how shoppers discover products today

About DataWeave

DataWeave is an AI-powered commerce intelligence platform that helps retailers and consumer brands see, understand, and act on what is happening across the digital shelf. By delivering granular intelligence across pricing, assortment, promotions, content, availability, and competitive performance, DataWeave enables teams to improve commercial outcomes with confidence at scale.

Get in Touch

Email: contact@dataweave.com or [Request a Demo](#)

For information on DataWeave's solutions, visit www.dataweave.com