



# E-COMMERCE IN THE AGE OF AI

Overcoming The Challenge of Optimizing  
Product Description Pages at Scale

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# INTRODUCTION:

## E-COMMERCE IN MODERN E-COMMERCE

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The e-commerce marketplace has come a long way since its inception. What started out in 1994 as the sale of a single CD has turned into a global phenomenon with sales that exceed an estimated 18 Trillion dollars. In the last decade alone

**the percentage of US retail sales conducted online has leaped from 5% in 2010 to ~18% in 2020.**

It is predicted that the annual volume of online retail sales will more than double by the end of the decade.

Despite the massive growth in e-commerce demand, online retailers struggle to address their single largest challenge, effectively optimizing their product description pages.



## CHAPTER 1

# THE CRITICAL ROLE OF THE PRODUCT DESCRIPTION PAGE

The Product Description Page (PDP) is the unavoidable destination in the customer journey. It serves as the definitive source of truth for all your omni-channel marketing efforts.



The e-commerce customer journey typically follows a familiar path. When a customer is interested in purchasing a product, they start by searching for it using their preferred search engine. They quickly scan the top 3-4 results and select a few listings for comparison. **They then interact with the information on the Product Description Pages (PDPs), where the content holds the critical weight of whether they convert or begin their journey through the messy middle.**

# WHY ARE PRODUCT DESCRIPTION PAGES SO IMPORTANT?

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Since customers cannot physically interact with products, the images and information on a customer description page have a huge impact on their purchase decisions. In fact, research conducted by Salsify reported that 87% of consumers said that well written product description pages seriously impacted their purchase decision.



“ **87% of consumers** said that well written product description pages seriously impacted their purchase decision. ”

# WHY ARE PRODUCT DESCRIPTION PAGES SO IMPORTANT?

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## 01 Providing Information to Make a Purchase Decision

Detailed and accurate product descriptions provide essential information about the features, benefits, and applications of a product, enhancing transparency and building trust with potential buyers. Adding high-quality images and videos can substantially elevate the product's appeal by allowing customers to visualize it from various angles and in real-life scenarios. Including useful and helpful content such as FAQs or Q&A sections can address common customer queries and concerns, providing additional assurance and clarity. **Product Description Pages (PDPs), when done correctly, can bridge the gap between online shopping and the tangible experience of evaluating a product in person.**

## 02 Showing up in Search Results

Search engines use the information available on PDPs in order to index and serve pages for search results. Incorporating relevant keywords into the product description, titles, headers, and metadata can help search engines understand the content of the page, making it easier to match with relevant search queries. **A search engine optimized product description page increases the likelihood of appearing in search results when potential customers search for related products.** Likewise, a well written page title and meta description increases the likelihood that a customer will click on your page.

CHAPTER 2

# THE CHALLENGE OF OPTIMIZING **AT SCALE**

If product description pages are so important, why don't brands focus more of their attention on optimizing them? They do! But it is a challenge.



# BRANDS FACE **THREE FUNDAMENTAL CHALLENGES** WITH PRODUCT DESCRIPTION PAGES

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- 01** Changing customer demand and search behaviors
- 02** Correctly optimizing product description pages
- 03** Scale



# CHANGING CUSTOMER DEMAND AND SEARCH BEHAVIORS

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Consumer expectations regularly change based on factors such as cultural events, latest trends or time of the year. These factors also have an impact on their search habits. As an example, during the autumn season, consumers may begin to search with the term “fall” to refer to colors or articles of clothing (e.g. fall jacket or fall colors). A brand may offer a line of lightweight jackets available on their website, but if the product description page is not optimized for the search term “fall jacket”, then the products will not appear in the search results.



# CORRECTLY OPTIMIZING PRODUCT DESCRIPTION PAGES

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There is also the challenge of optimizing the product description page. This requires someone who is familiar with the brand and the product being sold, has a strong understanding of search trends, knows how to optimize a page (e.g title, meta description, slug, focus key phrase) and who can write copy that influences visitors to become buyers.



**For a well trained copywriter, this process can take anywhere from 1-4 hours depending on the product and the length of the product description page.**



# SCALE

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Perhaps the most overwhelming aspect of optimizing product description pages is the scale. Mid-sized online retailers can easily manage more than 100 product description pages, each needing regular updates and optimization based on the latest trends or time of year. For enterprise-level retailers, this task is even more daunting, with tens of thousands, if not hundreds of thousands, of PDPs requiring continuous attention.

**“ Retailers should expect to reoptimize their product description pages every three months if they want to stay competitive. ”**

This process is not inexpensive or easy,

## LET'S DO SOME MATH

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An online fashion retailer, boasting a catalog of 100 products, aims to optimize their product description pages for each season, totaling four times a year. Considering an average of 2 hours per product page for optimization by a copywriter, and an hourly rate of \$80, the retailer faces a cost of \$64,000 to ensure comprehensive optimization across their entire inventory.



Beyond the expense, it is a matter of time. At best, in a single day, a dedicated copywriter would be able to optimize 4 products. This would take 25 days for a single person to optimize the 100 products once. To optimize the entire catalog each season, you will need a team copywriters with the single objective of optimizing product description pages all day everyday. This type of work quickly becomes repetitive and boring and will lead to employees leaving the company to take on more mentally stimulating challenges. 64% of e-commerce marketers say that they spend vast amounts of time on updating product description pages.

This process is not inexpensive or easy,

## LET'S DO SOME MATH (CONT.)

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### The impact

After coming to the realization that optimizing product description pages are both costly and time consuming, online retailers typically abandon the endeavor. Opting to ignore the majority of their products and instead focusing on a fraction of their inventory they believe will be worth optimizing. This decision typically has some unintended consequences.

### Increasing ad spend

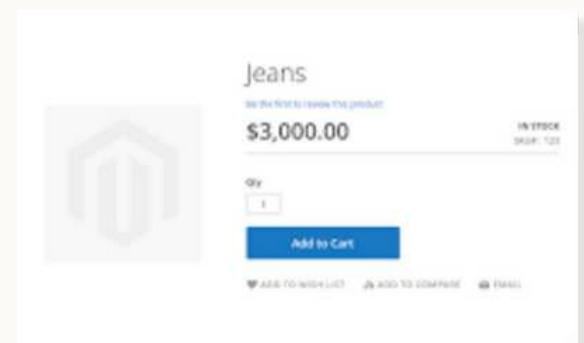
The other common consequence of poorly maintained product description pages is flatlining or decreasing sales, forcing brands to invest additional dollars into attracting visitors to the product description pages they are able to maintain. Ad costs continue to increase making brands either increase their prices or operate on thinner margins to compensate. Worst yet, when brands stop advertising, they see a sharp decline in sales.

### Zombie pages

The first consequence is the formation of what we refer to as zombie pages. Zombie pages are product description pages that are not regularly updated or optimized. Overtime, these product pages begin to “decay”, as image and video links begin to break and content becomes outdated. If pages are not regularly updated or interacted with, they will have increasingly lower search engine rankings. Not only bringing down the ranking of that single product page but also lowering the overall domain score for the website. For those visitors who do wind-up on the page, they will increasingly find a poorly maintained product page and have a negative view of the brand.

### Returns

When customers do purchase a product from a page that is not up to date, optimized or has a poorly written product description page, they are significantly more likely to return the item. In a 2022 Powerreviews survey, 56% of participants said their return was due to the item not matching the product description. This results in increased shipping and logistics cost as well as negative product reviews that slow down product sales and impact the retailer's brand.



CHAPTER 3

# INTRODUCING AI **FOR** **E-COMMERCE**



EKOM

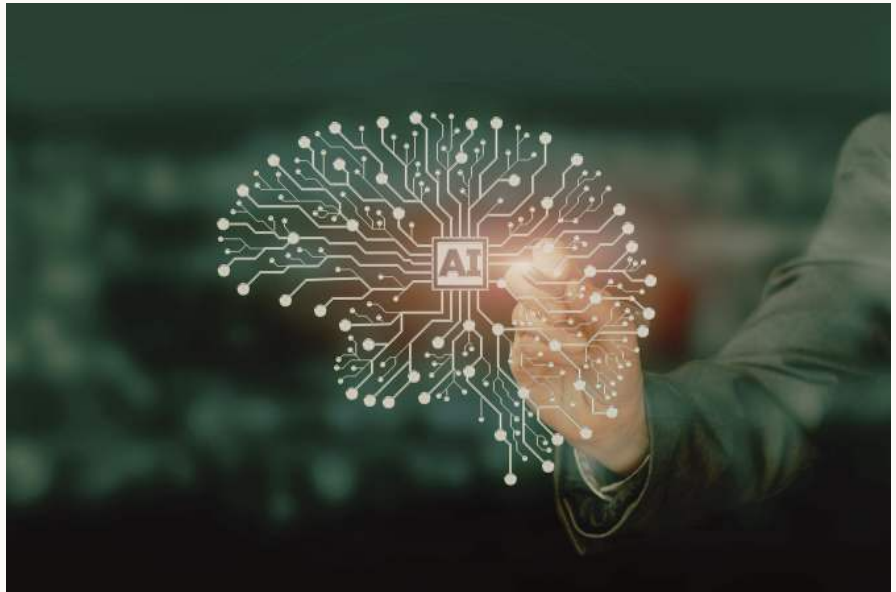
# ARTIFICIAL INTELLIGENCE (AI)

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**Artificial intelligence (AI)** is a term that has greatly increased in popularity since the launch of Open AI's ChatGPT. However it is not quite the sentient overlord that some fear it will become. Instead, today it is a useful tool for understanding large amounts of data, generating content (text, images, video) and quickly completing repeat tasks.

Behind AIs like ChatGPT (and other large language models) are two important technologies, machine learning and natural language processing. Machine Learning (ML): ML focuses on developing algorithms and techniques that enable computers to learn from large sets of data and make predictions or decisions on that data. While Natural Language Processing (NLP): NLP focuses on enabling computers to understand, interpret, and generate human language in a way that is both meaningful and contextually relevant. This involves tasks such as text parsing, sentiment analysis, language translation, and speech recognition.

When combining these technologies, it now becomes possible to automatically review large dataset, interpret intent when someone is speaking and automatically generate content based on that input.



# OK, SO WHAT DOES THIS MEAN FOR E-COMMERCE?

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With AI, it is possible to optimize your product description pages **at scale**.

AI is revolutionizing e-commerce by leveraging machine learning and natural language processing to automate complex tasks like content generation, personalization, and SEO enhancements. **AI can help digital storefronts generate high-quality, SEO-optimized product description pages tailored to attract and convert potential customers at scale.**



## CHAPTER 4

# EKOM'S AI-POWERED SOLUTION

With the launch of EKOM in 2023, online retailers can now overcome the challenges of maintaining, updating, and optimizing product description pages at scale. EKOM is an e-commerce optimization platform that leverages AI-driven insights and real-time SEO data to automate the creation and optimization of digital product pages. The is an end-to-end automated software that is constantly:

- **Listening:** 24/7 market surveillance
- **Diagnosing:** Identifying opportunities between demand data and supply data
- **Optimizing:** Enhancing product pages to align with market trends
- **Generating Content:** Creating content that mirrors searcher intent
- **Publishing:** Directly updating the CMS with optimized content
- **Re-Indexing:** Automatically re-indexing pages to keep them current





## Contemporary Short Twill Jacket

\$37.99

Khaki green

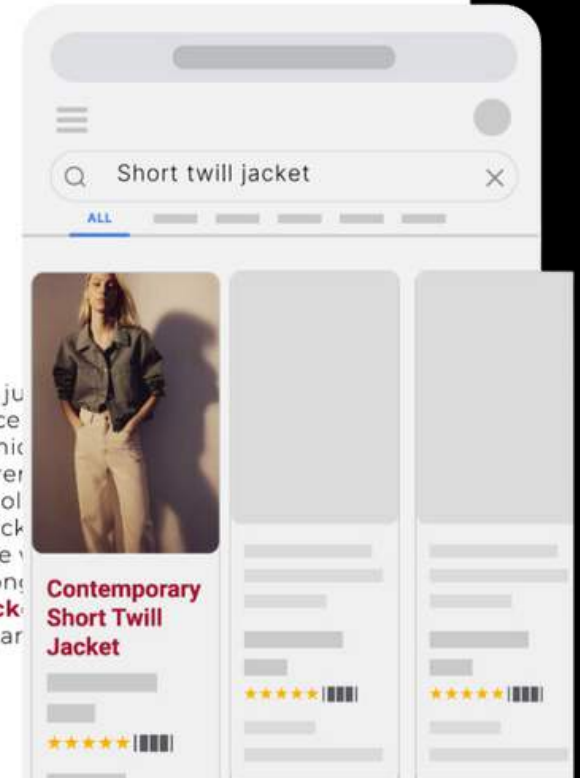


Description & Fit

New Arrival

Step into today's **fashion-forward** era with our just-launched **Short Twill Jacket**, a must-have ensemble piece. The juxtaposition of minimalistic design and dynamic loose-fit, boxy silhouette made with durable, premium fabric. This **fashion-forward jacket** features a distinctive color palette, accented with a subtle yoke design graced on the front, and robust patch chest pocket design. The back showcases a well-defined yoke, presenting an intriguing visual dynamic. The long button cuffs, accentuating the overall **sleek jacket** design. With a soft interior lining, this jacket encapsulates a raw elegance and

Article Number: 1230919001



Instead of manually updating product description pages, online retailers now have access to EKOM's AI-driven solution, **which operates around the clock to enhance their digital storefronts.** This advanced platform generates compelling product description content optimized with the latest search trends, attracting more visitors and increasing conversion rates.


# THERE'S A SCIENCE TO IT

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Although this may seem like science fiction, it is very real. EKOM works with some of the largest e-commerce brands to help them increase their revenue.


EKOM is working with the largest suspension training equipment company in the United States. After years of revenue growth peaking at total sales of over \$54 million, they began to experience increased costs and flatlining sales. They came to EKOM looking for solutions to ignite their sales, increase their rankings in search engines and manage their PDPs at scale

**Within the first 33 days the company saw significant gains:**

 **63%** increase in **total revenue**

 **26%** increase in **organic revenue**

 **51%** increase in **conversion rate**

 **9.9%** increase in **organic conversion rate**

These increases were not driven by advertising or additional campaign spend, but instead led by higher search rankings which led to greater organic traffic.

Assuming an annual turnover of \$54 million per year, our client saw an increase of \$2.8 million in the first 33 days. \$1.2 million of that being directly from organic traffic.

# CONCLUSION

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The transformative power of AI in e-commerce is no longer science fiction—it's a vital tool for online retailers to effectively manage and optimize their products, leading to increased visitors and higher turnover. Platforms like EKOM harness AI-driven insights and real-time SEO data to tackle the cumbersome and costly challenge of maintaining and optimizing product description pages at scale. **By automating these essential tasks, EKOM enhances the accuracy and appeal of online product presentations, significantly improving search engine rankings and conversion rates.**



This automation allows retailers to remain competitive and responsive to evolving consumer trends without the overwhelming costs and time associated with manual updates. As we embrace these technological advancements, the future of e-commerce looks not only promising but also imminent. **Automating the "here and now" of e-commerce is not just about staying current; it's about leading the charge in a continually evolving digital marketplace.**

# ABOUT EKOM

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**EKOM is a one-of-a-kind enterprise automation engine specifically designed for brands and retailers to maximize conversions and revenue within their digital storefront.** Pairing cutting-edge data science with intelligent automation, EKOM revolutionizes the way e-commerce storefronts dynamically leverage product data enrichment to unlock new levels of growth.

Founded in 2023, EKOM is a part of the AGYL AI suite of software embraced by more than one million users globally. With offices in the emerging tech hubs of Nashville and Brooklyn, EKOM is proud to engage in sustainable workplace practices.

