AI in action

VAIMO

Real-world use cases and opportunities for growth

akeneo KLEVU nosto

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About Vaimo

Vaimo is one of the world's most respected experts in digital commerce and customer experiences. For us, experience is everything. It is at the heart of all we do, and we are leading the way in delivering on it in these fields:

- Digital Commerce
- Content Management
- Data Management
- Insights & Activation

As a full-service digital experience agency, we deliver consulting, design, development, support, and analytics services within all four fields.

We are a global partner with a local presence, focused on cultivating close, long-term relationships with our clients. We work with brands, retailers, manufacturers, and organizations all over the world and have over 600 employees based in offices in more than 15 markets across EMEA, APAC, and North America.

Editor: Kristina Lupp
Design: Nina Lamberi

Introduction

Henrik Feld-Jakobsen
Chief Strategy Officer
VAIMO

In 2023, the landscape of Swedish B2B companies underwent a significant transformation with the adoption of Artificial Intelligence (AI), as revealed ***by a survey conducted by IDG and Vaimo.*** A striking 70% of these companies now leverage AI to enhance commerce, driven by advancements in language models and accessibility. This strategic move towards AI is primarily focused on enriching customer experiences and boosting operational efficiency. It's noted that companies with previous investments in AI encountered fewer obstacles in securing further funding, highlighting the compounded advantages of early AI adoption.

- A substantial 70% of companies surveyed are incorporating AI to some degree.
- Smaller businesses and retailers face more hurdles in AI adoption than larger manufacturers.
- A robust commitment to digital strategy is closely linked with AI maturity and talent recruitment.
- Around 80% of IT managers affirm that initial AI investments facilitate future funding opportunities.
- AI applications are widespread, with 26% of companies implementing it across all operations.
- There is an anticipated increase in AI investments, especially among manufacturers and e-retailers.

The survey, encompassing 100+ Swedish companies with an annual turnover exceeding SEK 1 billion, shows a growing trend of AI adoption across B2B sectors, promising a bright future for businesses embracing this technology.

This ebook picks up where our 2018 whitepaper AI and Ecommerce left off. Despite initial uncertainties, AI has seamlessly integrated into many aspects of our lives, forever changing business operations and customer interactions. IDC's 2018 Worldwide Digital Transformation Predictions have materialized, with AI adoption in digital transformation and commercial apps soaring. According to IDC's more recent ***Spending Guide***, by 2027, global spending on digital transformation is projected to hit $3.9 trillion. AI's capability to personalize customer experiences has been a game-changer in an era dominated by endless consumer choices. The evolution of AI in ecommerce signifies its transition from a novel concept to a crucial component of the ecommerce ecosystem. Initially aimed at backend operations and basic customer interactions, AI now encompasses deep personalization, predictive analytics, and advanced engagement strategies. This evolution from simple applications to complex, data-driven systems shows a broader shift in ecommerce, with businesses increasingly recognizing the strategic importance of AI integration.

AI's journey within the ecommerce sector illustrates a dynamic evolution from a basic utility to a strategic necessity. As AI technologies have advanced,

their applications have expanded, altering business-customer interactions and operational management. This shift is more than a mere technological upgrade; it's a clear transformation in the business-consumer relationship, emphasizing personalized, efficient, and captivating shopping experiences. With ongoing innovations, AI's role in ecommerce is poised for further expansion, promising even greater advancements in the years ahead.

The power of AI in personalized experiences

Jesse Créange
VP of Business Development
Supplier Data Management
akeneo

From bespoke suits in Savile Row to choose-your-own-adventure novels to Cher Horowitz's computer closet in the 1995 classic Clueless, the desire for personalization in commerce has been a timeless trend, reflecting the universal human need to feel recognized and valued.

In the digital age, this quest for customization has evolved from a craftsman's intuition to data-driven precision powered by Artificial Intelligence (AI). Rather than a cream-colored, dial-up dinosaur of a PC powering Cher's dream closet, we now have advanced machine learning algorithms and sleek software to provide personalization that acts as a pivotal element in the relationship between businesses and consumers, transforming not just how products are marketed and sold, but also how customer loyalty is cultivated and nurtured.

Benefits of personalizing experiences

The essence of a tailored experience has always been about connecting with the individual on a deeper level — a concept as enduring as the tailor's tape measure, yet constantly evolving with the capabilities of AI technology. But AI-powered personalization brings along other benefits as well, including:

- **Improved conversion rates:** By presenting customers with products, services, and offers that align with their interests and needs, businesses can increase the likelihood of purchase.
- **Competitive advantage:** Personalization can be a key differentiator in a crowded market. Businesses that excel at delivering personalized experiences can stand out from competitors, attracting and retaining customers more effectively.

- **Optimized marketing spend:** Personalization enables the more efficient use of marketing budgets by focusing resources on the right customers at the right time. Instead of casting a wide net with generic messaging, businesses can target specific segments with tailored messages, improving ROI on marketing spend.
- **Reduced return rate:** By leveraging customer data, including past purchases, browsing behavior, and preferences, AI algorithms can suggest products that the customer is more likely to be satisfied with or that fit appropriately. When customers purchase items that are closely aligned with their tastes and needs, they are less likely to return them.
- **Better customer insights:** The data collected through personalized interactions provides valuable insights into customer behavior, preferences, and trends. These insights can inform product development, marketing strategies, and customer service initiatives, creating a cycle of continuous improvement and further personalization.
- **Enhanced customer loyalty and satisfaction:** Personalization fosters a sense of being valued and understood by the brand, which can significantly enhance customer loyalty.

4 ways to personalize the customer experience with AI

In an era where customer expectations continually evolve, businesses are increasingly turning to AI to personalize the customer experience in innovative and impactful ways. And while that's very exciting, it's always important to remember that the advancement of AI is still in its infancy!

While we may still be at least a few years away from fully autonomous robots acting as our personal shopping assistants, that doesn't mean that there aren't concrete ways that AI technology can address customers' unique demands and preferences today.

Translate & localize product content

01

Today's global economy demands that businesses reach international markets and resonate with them on a cultural level. Small discrepancies, such as regional differences in spelling, like "color" and "colour," or units of measure, like meters versus feet, can significantly impact search functionality and customer experience.

AI-driven localization algorithms adeptly tailor product content to align with regional preferences, linguistic nuances, and cultural contexts. This tailored approach not only enhances the customer experience but also fosters a welcoming and inclusive brand image across the globe.

Reduce errors & gaps in product data

02

Data consistency and accuracy are paramount for businesses aiming to maintain a strong brand image and build customer trust. Accurate product tags and descriptions help ensure that search algorithms return relevant results, and detailed product data, including cost, demand, and competitor pricing, can be used to optimize pricing strategies in real-time and offer personalized discounts or promotions to different customer segments.

Yet, ensuring data accuracy across product descriptions, pricing details, and specifications is a colossal challenge, especially for enterprises operating on a global scale. AI-powered solutions are stepping up to address this issue by sifting through vast datasets of product information to identify discrepancies, outdated information, or inconsistencies, ensuring customers receive reliable and accurate data across all interaction points. This capability is crucial for businesses that aim to provide their customers with reliable and up-to-date information, regardless of the platform they use.

Provide data-driven, personalized product recommendations

03

When people think about how AI will impact the shopping experience, personalized product recommendations that take into consideration previous shopping behavior, current trends or seasonality, and availability data are likely what comes to mind. And there's a good reason for that—it's a very exciting area of technological development for both consumer and company!

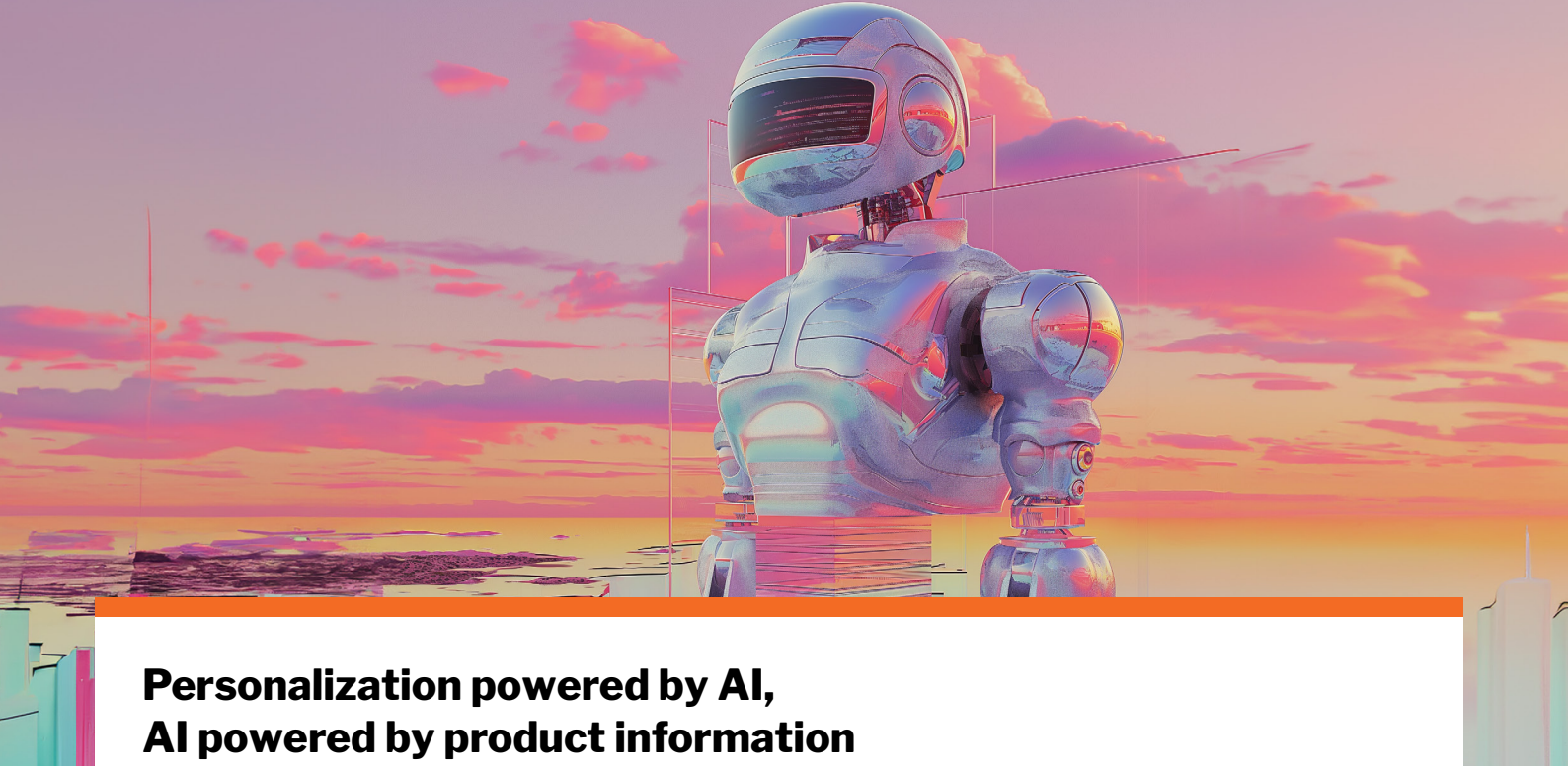
AI algorithms excel in analyzing massive datasets of customer purchase histories and trend analyses to identify patterns and suggest highly targeted compatible products. This strategy broadens the customer's exploration of available products and enhances their connection with the brand. The result? A win-win situation where customers enjoy a customized shopping experience, and businesses benefit from increased loyalty, higher order values, and overall customer satisfaction.

Enhance customer support efforts

04

The mention of chatbot support might evoke mixed feelings. Still, there's no denying AI's significant impact on customer support, specifically in its ability to provide prompt and effective customer service at scale. AI tools analyze support tickets, chat logs, and customer interactions to pinpoint common queries and issues, enabling customer support representatives to focus on more complex and critical inquiries.

By automating responses to simple, frequently asked questions, AI facilitates swift resolutions, reducing the need for human intervention. Meanwhile, support teams can dedicate more time to offering personalized, in-depth assistance for complex issues, fostering a positive emotional connection with the brand.



Personalization powered by AI, AI powered by product information

The recent strides in AI, particularly in the realm of personalization, have been remarkable. Yet, the crux of the matter remains identifying the right attributes, data, and values essential for crafting meaningful inputs.

AI algorithms analyze product and customer data to understand individual preferences and create personalized recommendations or predictions. Yet, if that data is inaccurate or incomplete, then it doesn't matter how advanced the technology is; the outcome will be inaccurate or incomplete. An AI solution can recommend a customer to purchase a certain skirt that is frequently purchased with a top they have in their shopping cart; however, the effectiveness of that recommendation hinges on the quality and specificity of the product information fed into the system.

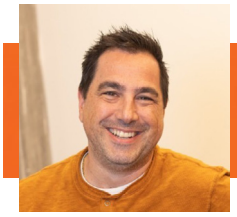
Regardless of how advanced technology becomes, the foundation of reliable, high-quality product data truly unlocks AI's transformative potential. As businesses turn to technology like AI to provide hyper-personalized experiences, ensuring data quality and completeness needs to be the first priority to ensure that AI-driven product experiences reach their full potential.

The future of personalization

Personalization has been and always will be on trend, and the advancements of AI technology promise to only support this notion. AI technology offers a comprehensive suite of benefits that can fundamentally transform business operations and customer engagement and build deep connections with consumers that drive repeat sales and lifelong relationships.

But the cornerstone of these advancements lies in the meticulous management of product data, ensuring accuracy, consistency, and relevance across all customer touchpoints. As AI becomes more ubiquitous in our day-to-day lives, businesses that want to harness its power need to prioritize data accuracy and completeness to unlock the full potential of personalized experiences. This symbiotic relationship between AI and high-quality product information paves the way for a future where personalized customer experiences are not just a competitive advantage but a fundamental expectation.

How does Generative AI help commerce experiences?



Marc Stracuzza
Director of Portfolio Strategy
commercetools

How can we leverage Generative AI technology to help create more robust commerce experiences? What we know is that Generative AI is very good at patterning and mimicking the way humans interact with each other.

Current state-of-the-art commerce experiences are, for the most part, predefined interactions:

- The brand creates content
- The user consumes content
- Each of these are separate processes

While the content can be tailored to individual users, this content is static:

- A product page lists static information
- This may be localized, but it isn't dynamic
- A customer searches through content sources by static facets and words
- Ads might vary based on user behavior, but the ads themselves are static

AI can be trained to:

- Interact with people in their own language and way of speaking
- Convert data and words to expand search criteria for better results
- Answer natural language requests instead of having people try and figure out how to find what they are looking for
- Dynamically create content in all areas of the user experience

Product descriptions

The first set of commerce use cases that started leveraging Generative AI was the generation of product descriptions. Generative AI is very good at creating and modifying text, based on a given set of inputs. So you can ask your AI to take a few product facets and generate descriptions in a specific tone of voice or for a specific customer type.

With the new updates in image recognition, you can also just give an AI a picture of the product and ask it to write a set of facets and a description. If it isn't right the first time, you can just ask it to update its output based on the changes you'd like to make.

Of course, image recognition could just as easily be image generation. If you provide a set of facets and a description, Generative AI can create imagery to portray that visually.

So let's talk a moment about how this can be accomplished. For new content generation, it's really just as easy as prompting an AI on what information you'd like it to output. If you're working within Brand guidelines, you can set up your context to be the Brand persona. This will enable the AI to know how it should format the output with regards to tone and style.

At commercetools, we did a proof of concept integration for product description generation leveraging our APIs and ChapGPT4. It took one of our Customer Success Engineers a little over an hour to accomplish the full end-to-end proof of concept. This included a Merchant Center integration. This shows the power of both Generative AI, but also having easily integratable APIs. This might be a great way to introduce AI into your processes.

But this is for the generation of new content. What do we do with existing content that might not be performing to the level we'd like? Let's say we get our Predictive AI to tell us when a product is underperforming compared to peer products. We can have an AI parse that page and its content. We can also have it parse the more successful peer pages. Then we can get recommendations on how to improve the performance of the underperforming product.

Again, this can be accomplished by leveraging mostly off-the-shelf Generative AI. Simply provide it with a link to your website or the underlying back-end data that surfaces into your website. You might need to set your token count a bit higher to ensure the multiple examples are correctly remembered.

For either of these use cases, you can train your model for more aligned results. The more you train, the more the model will reflect your desired results and the less hallucinations you'll encounter. To lower the variance on the output, set your Generative AI temperature to a low value. If you'd like more creativity, and the accompanying less accuracy, set that temperature higher.

Personalization

Leveraging your user data, you can work with a Generative AI to create hyper-personalized content. This can come in many forms, but the common thread is tailoring the content to the individual and not the user type. So, it doesn't matter by whom or when the content was originally created. Generative AI is a pathway into meeting people where they are, right now.

Okay, so let's start by talking about basic human consumption of information. There are over 7000 languages spoken in the world. Realistically, we cannot spend time localizing content to all of those. But AI can dynamically take a single source of information and translate it to the user's preferred language.

But even within the confines of a single language, we all speak slightly different versions. We learn and understand information differently based on where

and how we grew up and where our experiences have taken us. AI can generate content that matches the way we talk and the way we inherently listen.

The beauty of this style of personalization is that AIs can do it with a high level of confidence, today. Most LLMs have been trained on massive amounts of publicly available content in all sorts of languages. That enables them to be very good at translating content and at imitating tone and modifying content towards that tone. If you haven't already, I encourage you to play around with a model and ask it to generate some text. Then ask it to take that generated text and write it in the style of Shakespeare. It's a fun way of seeing the power that exists in these LLMs.

As another example, maybe a major brand signs a celebrity as a spokesperson. The customer-facing experiences can be dynamically updated to sound and read as if it were that celebrity talking. Your chatbot can become anyone. And all of this can be done without updating the source data set. AI is taking the singular source data and presenting it differently based on your needs.

This would take training a model on this celebrity's voice. And by voice, I mean both the actual vocal voice and the written voice. This might be easier than you think. If this celebrity already has a lot of content on the internet in their voice then the AIs may already be trained on them. Take my Shakespeare exercise from before as one such example. But even if that data doesn't exist, you can train an LLM on this new data set by just giving it access to a set of examples and then fine tune that model to ensure the results are in line with your expectations. Sometimes this tuning can take time to get right, but the results can be astounding.

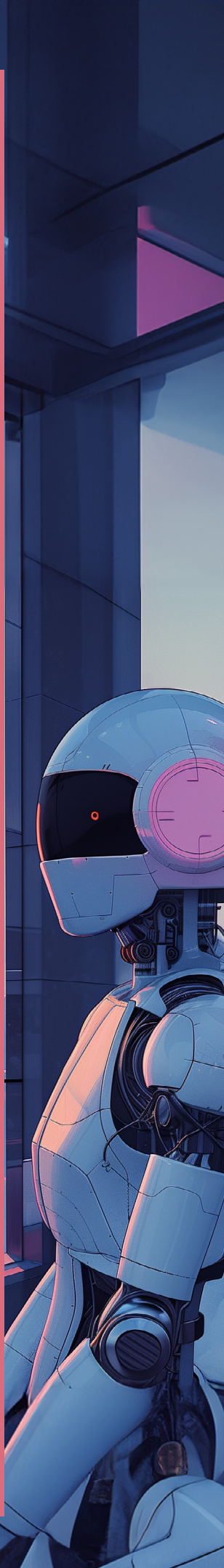
Let's look a little bit into the future. In the future, you'll be able to dynamically create content as it is consumed based on either base-information templates or fully generated content.

Imagine viewing a TV show and a character comes out holding a can of soda. Based on user data, we know that I prefer Coke whereas my kids prefer Sprite. So the same show, the same content, but the can of soda is dynamically generated to be one or the other based on who is watching.

The same applies to images and ads. The content can be dynamically created based on the up-to-date customer profile. And as the user shops, that profile changes and the images can be dynamically updated.

For all of this, you'll want to ensure a high level of accuracy in your responses. This will take a significant amount of model training and tuning. If you're going to open up dynamic content, you have to be sure it won't do something to damage the Brand. This is why hyper-personalization is likely a bit down the road as far as practical usage. It's going to take some time to identify how to properly build the trust needed to let AI loose.

So we now know we can dynamically shift the tone or language of what was once static information. And perhaps we now have our chatbot trained to sound like your favorite celebrity. But aside from the experience being more relatable, is it higher quality? Is it going to lead to higher conversion rates?



Conversational experiences

If you've experimented with any of the Generative AI offerings, you'll know that they are very good at understanding your request because they can understand human language so well. So as we expand our user experiences to include conversational AI, we open the ability for our users to talk to our products and information. A person just talks to the AI and describes the type of person they're buying something for and the AI can consume that information and interact with the Search to source recommendations.

AI is also really good at combining multiple sets of information together. So if we're looking for a car seat that fits comfortably in the back of my smallish car for under $100, I can just tell the AI what kind of car I have and what requirements I have. It can then compare its vast data set against the provided product description and provide a list of recommendations.

Or instead of searching through all user reviews looking for the one specific piece of information I want, we can just ask an AI assistant to provide the answer based only on the user reviews. To accomplish this, we'll need to train our internal models on each new review as it is written.

With AI, we're migrating away from having to try and fight with interfaces to get the information we actually want. We can just interact with AI and have it do the hard work.

AI in customer experience: Revolutionizing interactions and personalization

Nilay Oza
CEO and Co-Founder
KLEVU

The expectation for an intuitive search experience is higher than ever now, thanks to the boom of Chat GPT in 2023. More recently, in ecommerce, pioneers like Amazon have been using Natural Language Processing (NLP) for years, Walmart's new conversational search experience, and Shopify's new Shop app. All examples of retailers with massive budgets experimenting with AI to enhance their ecommerce conversion.

Retailers are now prioritizing search as a key component of the ecommerce experience, but relevancy, understanding, and effective personalization are paramount, no matter how innovative and shiny something is. Since 2013, Klevu has been pushing the envelope and building out algorithms and merchandising controls to ensure each customer's experience is relevant and unique at scale, significantly impacting engagement and conversion rates.

A quick lesson in AI types for ecommerce search

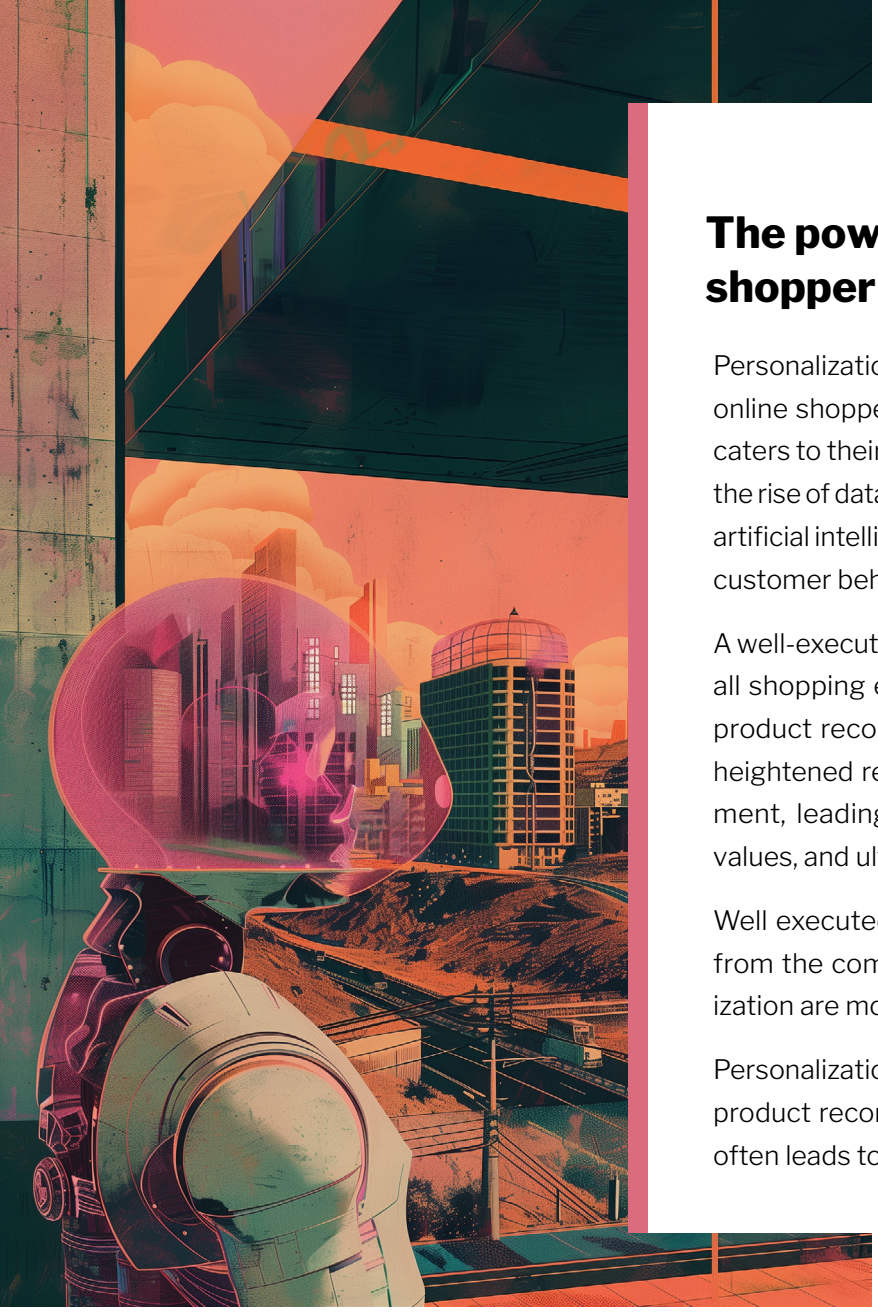
Everything we do on an online store is some form of discovery. Every single visitor to a webshop comes with a purpose, a purpose that has discovery so inherent within it. As a retailer, you want to capture this intent without creating any friction in the shopping experience. This is where a mature AI discovery technology differentiates miles apart from a mediocre one.

Two crucial aspects of search functionality are information enrichment and extraction. It's essential to organize information systematically to facilitate smoother and quicker extraction. Yet, the true value of this organized data is only unlocked through proper understanding and enrichment, ensuring the information's relevance and utility. That is harder and less scalable than one may think unless you utilize AI.

Here is a short lesson on the technologies that have underpinned ecommerce search technology in order of effectiveness.

- **Keyword-based search:** Focuses on scanning for exact keywords within an index. Its benefits include simplicity and versatility across languages, but it struggles with accuracy and context understanding.
- **Semantic search:** Understands the meaning and intent behind queries using Natural Language Processing (NLP). It offers expanded search coverage and relevance by understanding intent but is challenged by data quality and language nuances.
- **Vector search:** Uses numerical representations in a multidimensional space for search, providing computational efficiency and scalability. However, it lacks in semantic understanding and assumes uniform vector origin, which might not always be accurate.
- **Neural search & neural networks:** Leverages interconnected data points and deep learning to comprehend complex patterns and relationships, offering adaptability in machine learning. The main challenges are the complexity of understanding the cause-effect for relevance and the need for continuous training.
- **Conversational search:** Engages users through natural dialogue, enhancing discovery and interaction. It benefits from leveraging ongoing conversation context but requires multiple underlying strategies and AI models for effectiveness.
- **Multimodal:** Integrates various AI models for comprehensive outcomes across different domains, offering a versatile approach to search.

Klevu's approach to AI search is described as ”multimodal,” utilizing components from each methodology along with proprietary semantic processing, patented synonym enrichment, and direct interaction with Large Language Models (LLMs). This strategy allows for a robust, flexible search experience that adapts to human language and intent complexities, positioning Klevu as a leader in AI-driven ecommerce search solutions.



The power of AI in understanding shopper preferences at scale

Personalization is no longer a luxury but a necessity. Today's online shoppers respond best to a tailored experience that caters to their unique preferences and needs. This has led to the rise of data-driven personalization strategies that leverage artificial intelligence (AI) and machine learning (ML) to analyze customer behavior, preferences, and purchase history.

A well-executed personalization strategy enhances the overall shopping experience by offering relevant and targeted product recommendations, content, and promotions. This heightened relevance, in turn, increases customer engagement, leading to higher conversion rates, average order values, and ultimately, customer lifetime value.

Well executed personalization helps businesses stand out from the competition. Companies that prioritize personalization are more likely to see sustainable, long-term growth.

Personalization, in search results, category listing pages and product recommendations, should be top priorities, as this often leads to revenue generation.

Paul Smith: Automated merchandising - *Read the case study >*

Paul Smith entrusted Klevu's AI to automatically merchandise products, reducing the manual labor of merchandising to a minimum and freeing staff to focus on other critical areas.

Results: Revenue from search increased by 74%, and ecommerce conversion rate improved by 31%. Notably, conversion rates from men's category pages went up by 33.75% YoY during peak trading.

Bare Minerals and Laura Mercier: Dynamic personalization - *Read the case study >*

Automated personalization meant no manual segmentation of customer groups, saving time for Bare Minerals and Laura Mercier while enhancing customer targeting.

Results: The automated, yet highly personalized approach led to a 38% increase in AOV for Laura Mercier and a 26% ecommerce conversion lift for Bare Minerals.

Collaborative filtering and segmentation for upsell and cross-sell

Collaborative filtering is another technique used by AI-driven personalization systems, like Klevu, to provide privacy-aware recommendations using clickstream. This approach analyzes the behavior of other shoppers who have purchased similar products, then suggests items that those shoppers have also bought or shown interest in.

By using collaborative filtering, ecommerce teams can provide upsell, cross-sell, and alternative recommendations that are tailored to the shopper's interests automatically. This method does not rely on personal information, instead using behavioral data to create relevant suggestions.

As for segmentation, Klevu is actively working on customer segmentation, adopting a hybrid approach that utilizes existing systems such as third-party connectors, as well as developing its own segments based on shopping behavior. By doing so, Klevu aims to refine its personalization algorithms and further enhance the shopping experience for users.

The integration of AI tools can lead to remarkable improvements in ecommerce performance. For instance, Klevu's AI Product Discovery Suite integrates seamlessly with platforms like Klaviyo, enhancing email and SMS marketing campaigns with personalized product recommendations. This synergy between AI technologies not only saves time for ecommerce teams but also boosts conversion rates and customer engagement.

The Cambridge Satchel Co encountered a customer experience challenge when their customers were returning to the website multiple times before making a purchase. To tackle this issue, the brand turned to Klevu's advanced AI solutions, implementing segmented AI product recommendation banners across various pages of their website. By leveraging first-party data from Klaviyo, they achieved remarkable results, with these segmented banners achieving an impressive 16% higher click-through rate and an outstanding 64% higher conversion rate compared to non-segmented recommendations.

The emergence of conversational commerce

Conversational commerce, utilizing chatbots and automated technologies, offers a more engaging shopping dialogue. This approach not only enhances customer engagement but also provides 24/7 product discovery guidance, cost savings, and a cohesive omnichannel experience. However, the success of conversational commerce hinges on the intelligent application of these technologies.

A shining example is Klevu Moi, a new AI-powered chat tool that transcends traditional chatbot capabilities. As featured in Gartner's Generative AI for Commerce Report, Klevu Moi adds that touch of innovation to on-site search experiences, allowing customers to inquire about any indexed data, including product details and reviews. This not only simulates the experience of interacting with an in-store assistant but also personalizes the shopping journey, making ecommerce more engaging and intuitive.

In conclusion, as we look to the future, the role of AI in business and customer experience is only set to expand. Companies that embrace AI's potential for personalization and conversational commerce will not only stay ahead of the curve but also forge deeper connections with their customers. By leveraging tools like Klevu and adopting a strategic approach to AI implementation, businesses can unlock new opportunities for growth and revolutionize the ecommerce landscape.

AI within your commerce experience: fueling relevance and efficiency

Eve Rouse
Content Marketing Manager

Artificial Intelligence has quickly become a hot topic on everyone's lips, and the ecommerce industry is no exception. With such rapid advancements in AI technology over recent years, retailers are now poised to deliver highly relevant commerce experiences at scale.

In this chapter, we discuss the different ways in which ecommerce brands can leverage AI-powered technology to build relevant and engaging on-site experiences that resonate with their shoppers, while powering internal efficiency. Let's get to it.

Creating relevant, engaging commerce experiences

The obvious way to improve relevance across your ecommerce store is, of course, to personalize it. And the first step to effective personalization is to understand your audience—at which point AI's ready lend a hand.

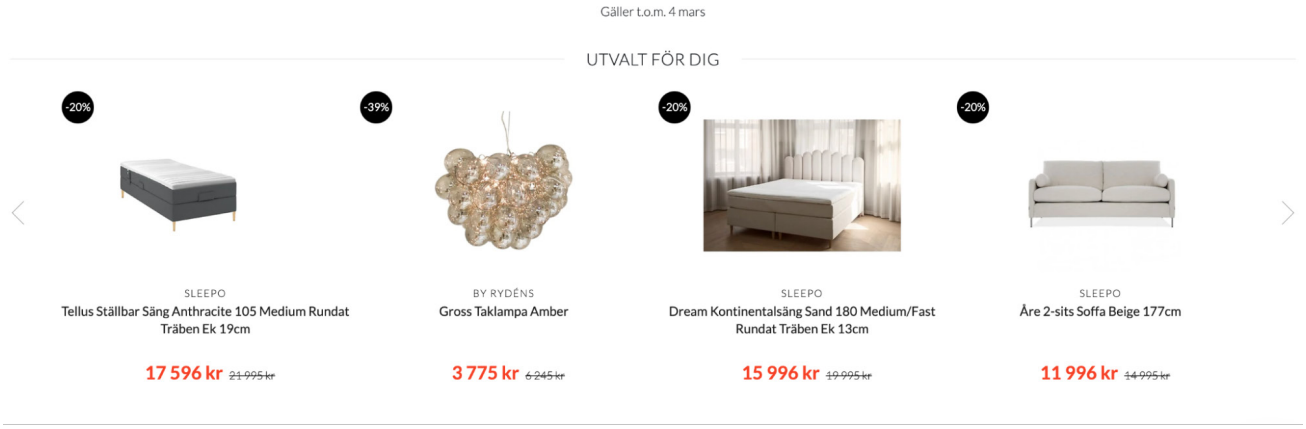
Personalization technologies like Nosto's, for instance, use a combination of machine learning, predictive intelligence and data modeling to analyze huge volumes of customer data from which they can spot patterns and predict future actions that illuminate targeting opportunities for merchants.

Suggesting lucrative shopper segments

For example, Nosto's Predictive.AI acknowledges different shopper signals that might include cart abandonment, visit frequency, traffic source and more (all depending on the store) as indications that a shopper is close to making a purchase. It might then suggest a "prospect" segment be created for those shoppers, who merchants can then target with specific commerce experiences that nudge them towards conversion.

For example, our client, Sleepo, serves product recommendations on their homepage to a 'prospects' segment which fires products to returning visitors based on their browsing history.

Second to this, our client, Cykloteket, took Nosto's out-of-the-box 'prospects' segment to create personalized social media campaigns that targeted this group on the likes of Facebook and Instagram. This resulted in them doubling their ROAs (compared to their more generic retargeting ads).



Appreciating precise affinities for more relevant product discovery

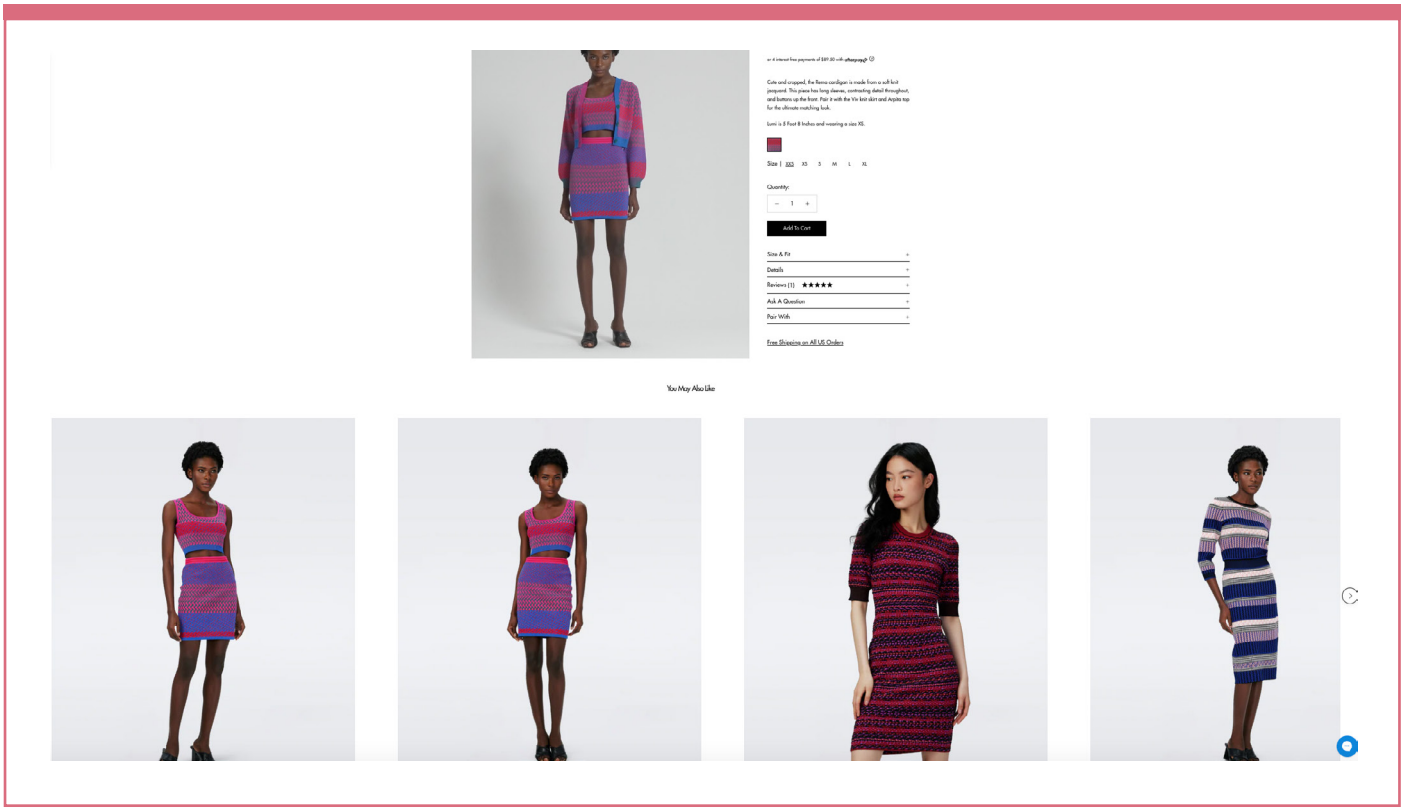
If you want to get hyper-targeted with your commerce experiences, AI can also sift through shoppers' behavioral and transaction signals to uncover their individual preferences (what we, at Nosto, call "affinities"). These signals might include:

- Regularly selecting, or purchasing a certain clothing size (establishing a size-based affinity)
- Frequently viewing products of a certain brand (establishing a brand-based affinity) on multi-brand retailer sites
- Searching for or viewing products in specific colors, patterns, and cuts (establishing a style-based affinity)

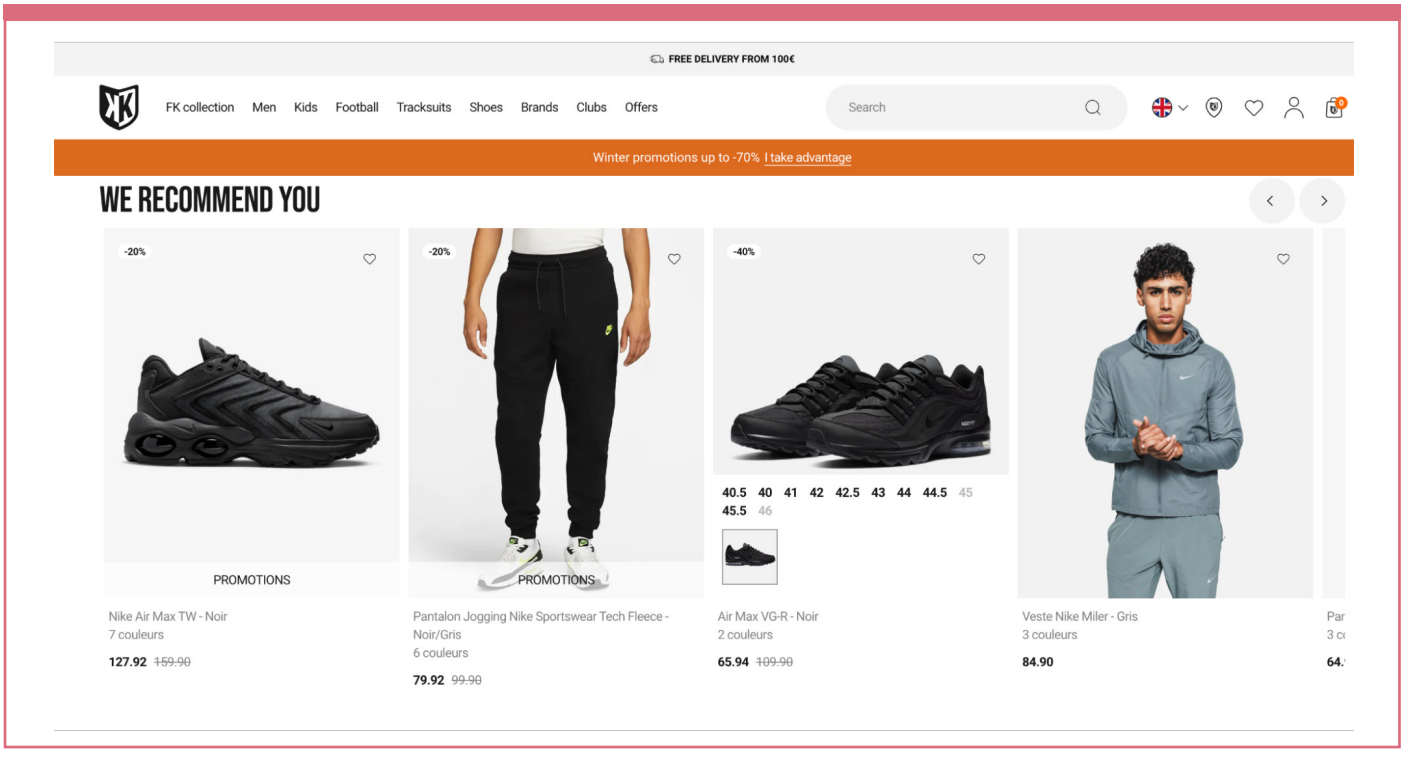
Appreciating shoppers' preferences for the above means you can then weight relevant products more heavily across your store to different users, such as within search results pages, product recommendations, and category pages.

For verticals such as fashion, product discovery is largely driven by visual elements, so the ability to have Visual AI detect and suggest additional products based on their appearance can be a key conversion driver.

Our client, Diane Von Furstenberg, for example, uses product recommendations directly within product pages that highlight visually similar products to the one currently being viewed.



Another example is our client, Footkorner, whose homepage product recommendation banner fires Nike products to those they've established as having an affinity to the Nike brand.



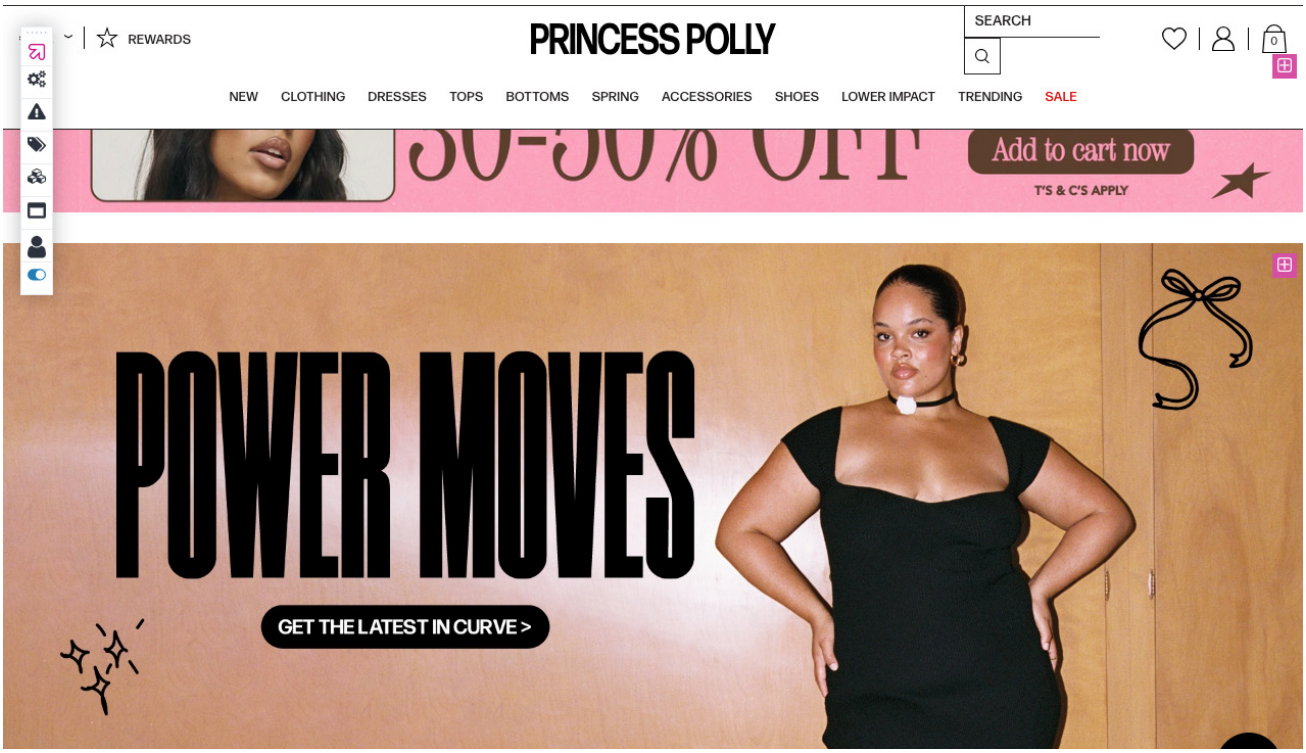
Do note, since the majority of affinity signals are left by shoppers who merely browse a site (without buying anything), not leveraging behavioral data to establish affinities (and relying solely on transactional data, for instance) means you'll be missing a big piece of the pie!

Ensuring content doesn't become an afterthought

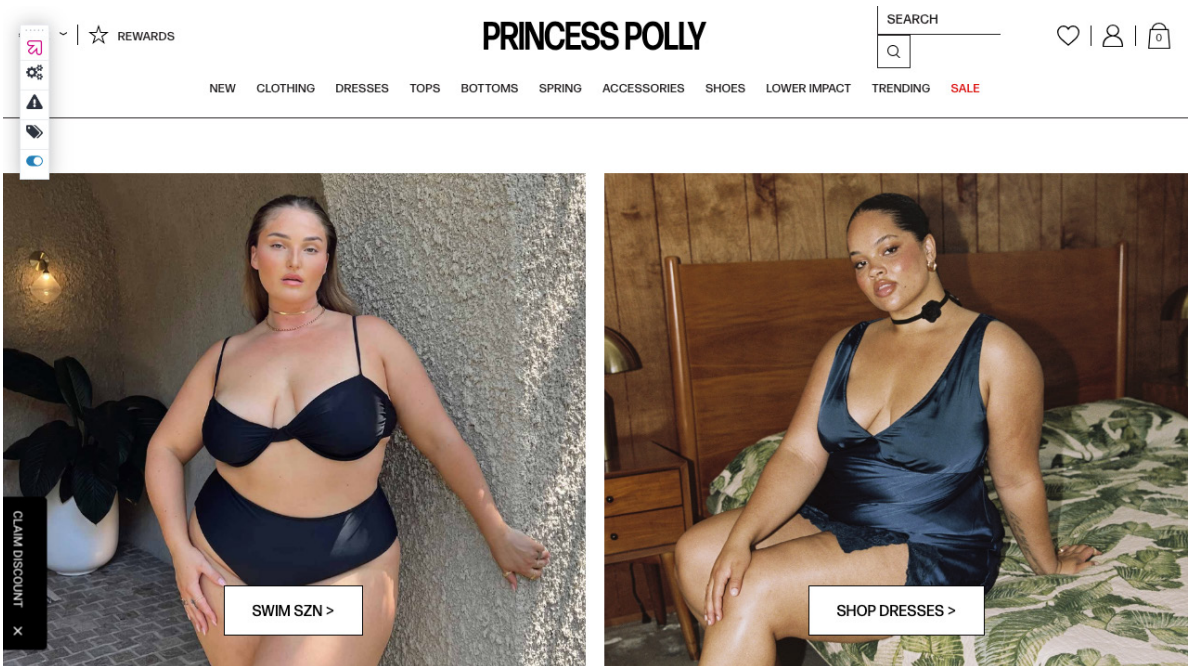
Aside from ensuring a more relevant product discovery experience, AI-powered personalization technology can also be used to help brands create targeted content experiences in their stores, such as hero banners, pop-ups, content tiles, and more.

As with your product discovery efforts, AI helps establish the likes of shoppers' brand affinities and lifecycle stages, which inspires potential content personalization opportunities to make for a more immersive onsite experience, products aside.

For example, our client, Princess Polly, has personalized its entire homepage experience for shoppers that have an affinity for products within its 'curve' line. Aside from its homepage product recommendation banner (that features new products within its curve category), it has a hero banner featuring a curve model that gives direct entry to their curve category, as well as content tiles featuring curve models pointing people to further curve subcategories, such as swimwear or dresses.



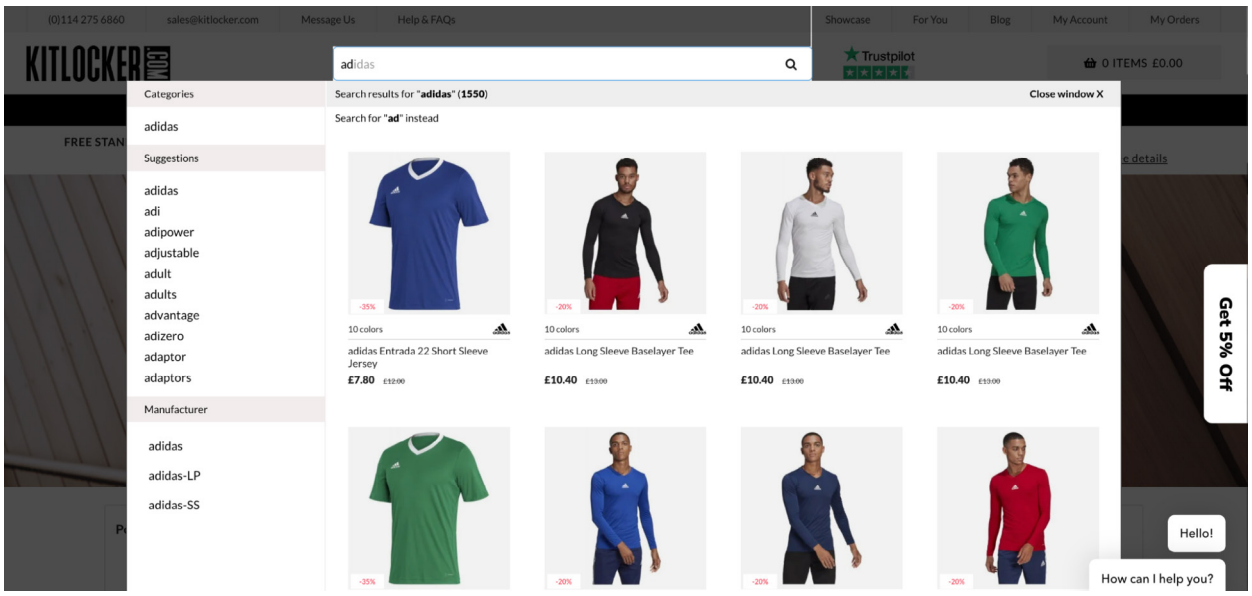
As well as making the onsite experience more engaging and relevant, personalizing your content campaigns can also be handy in removing friction from the shopping journey. For example, a merchant might have a pop-up campaign that offers visitors 10% off upon newsletter sign-up. But with the help of AI, they could make it so that the pop-up is only shown to first-time visitors, preventing frustration from shoppers being continually exposed to it.



Understanding a shopper's true search intent

Another way in which AI helps merchants better understand their shoppers and deliver greater relevance on site is within the search experience. Nosto's Personalized Search, for example, leverages Semantic.AI to fuse natural language processing (NLP), large language models (LLM), and self-learning algorithms to appreciate a user's true search intent. Essentially, these fancy technologies work as a team to draw links between words within a search query and what's in your product catalog, so they can serve up relevant search results that might otherwise lead to dead-ends.

For example, our client, Kitlocker, appreciates the search intent as soon as a user begins to type. See below: specifically, how, when a user types "ad" into their search bar, it suggests "Adidas" as a keyword, and dynamically updates the results page with Adidas products.



Supercharging your productivity

Aside from the benefits that AI brings to your end-user experience, it's proving transformational for ecommerce teams too, bringing new opportunities for automation that have previously demanded serious manual effort (if been doable at all).

Streamlining content curation

For example, many ecommerce/marketing teams are all too familiar with the constant challenge of ensuring their visual content is kept updated (not only across their website, but within other marketing channels too). When dealing with huge volumes of content, this can be particularly tricky.

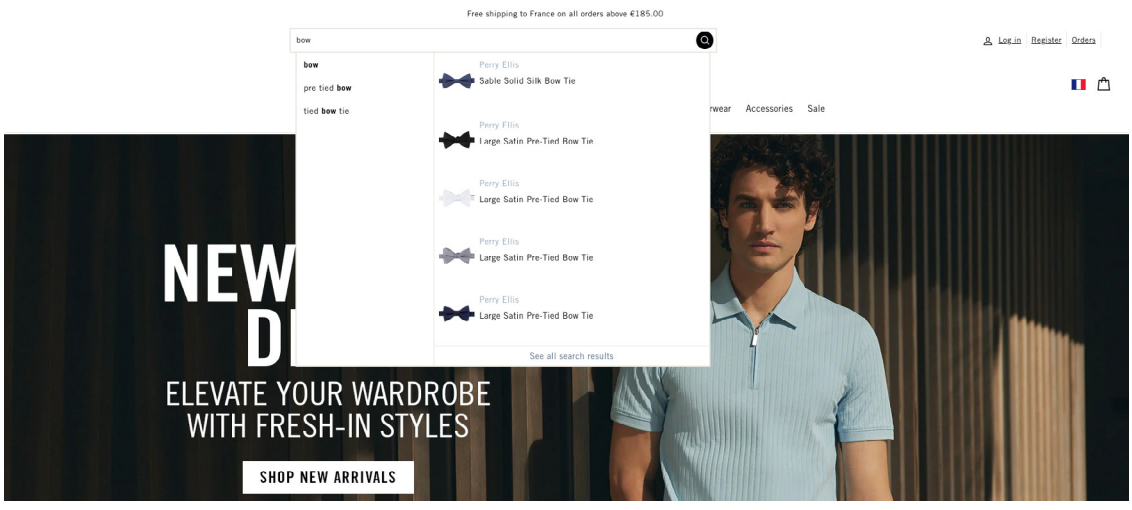
This is where Visual AI comes in. Nosto's Visual AI, for instance, uses advanced machine learning algorithms to identify elements within your visual content (such as objects, scenes, events, emotions, styles, colors, patterns, and more) and turns them into machine-readable datasets. It then automatically applies tags to the content, enriching it with metadata that enables teams to quickly find and filter for specific content and publish it across their website, social channels, and more.

Collating highly relevant synonym suggestions in seconds

Another area you'll be happy to know that AI can lend a hand with is curating synonyms for shoppers' on-site search queries. A strong search experience hinges on a good synonym setup that bridges the gap between queries and product data. But getting there takes hours of time (analyzing lists of 0 zero results page queries, then determining where those queries can be feasibly mapped).

Enter Generative Synonyms! Instead, AI-powered search solutions like Nosto's Personalized Search use semantic and predictive AI models to generate a list of suggested synonyms based on shoppers' behavioral data, having analyzed a store's previous queries and any subsequent purchases made. These AI-generated synonyms are then filtered through ChatGPT to find other relevant synonyms, providing a pool of additional options for merchants to quickly supplement their master synonym list with.

For example, our client, Perry Ellis, added 'bow' as a synonym for 'bow tie', thanks to our AI-generated synonym feature!



Putting your on-site merchandising on auto-pilot

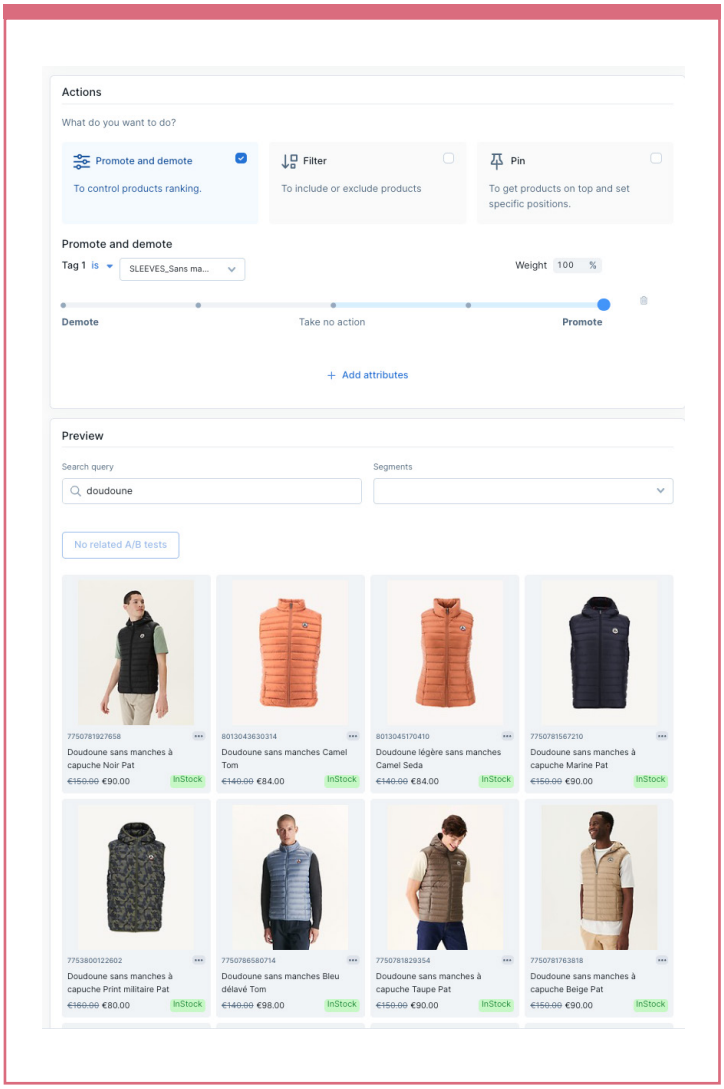
Finally, a good merchandising strategy has long been the cornerstone of ecommerce, but tackling this manually is nigh impossible since it demands such constant intervention.

However, with AI-powered merchandising solutions, like Nosto's, for instance, merchants can automatically sort products within the likes of category pages, search results, and product recommendation placements, to various effects:

- Personalizing product sorting around shopper affinities, or local weather conditions, to increase conversion likelihood
- Optimizing product arrangement towards specific business goals, such as boosting high-margin products to increase profitability
- Ensuring product sorting aligns with specific marketing campaigns, such as prioritizing Black Friday Cyber Monday deals across Cyber weekend

For example, our client, Jott, has a merchandising rule in place that boosts sleeveless down jackets across both search and category pages to segments of shoppers who are geolocated in places with predicted warm weather conditions.

The applications of AI in driving more relevant and engaging commerce experiences are infinite. It has paved the way for brands to deliver extreme relevance, faster and easier than ever before. It's an exciting time for ecommerce, and we can't wait to see what's next.



Powered by experience.AI™, Nosto's Commerce Experience Platform brings a set of tools rooted in automation and AI that are designed to action customer, product, and content data to increase online revenue through end-to-end commerce experience management.

If you want to learn more about how our AI-powered platform can solve your pain points and surpass your ecommerce goals, we're ready when you are.

Conclusion

Artificial Intelligence (AI) is not just a fleeting trend but is reshaping the landscape of ecommerce and beyond. From the practical applications demonstrated by our partners, we hope that this eBook will inspire and guide you in harnessing its potential.

These pages underline a critical narrative: AI is democratizing personalization, optimizing operational efficiencies, and creating new paradigms for customer engagement. It's facilitating a shift from traditional, one-size-fits-all approaches to dynamic, data-driven strategies that cater to customers' individual needs and preferences. Moreover, the real-world applications illustrated here show AI's role as not just a technological tool but as an incentive for innovation, enabling businesses to explore uncharted territories and redefine what's possible.

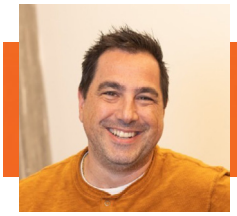
Businesses must continue investing in AI, not just as a means to enhance efficiency or personalize customer experiences, but as a strategy to future-proof their operations against an ever-evolving technological landscape. As AI continues to mature, its integration into every aspect of ecommerce will become more seamless, opening doors to new opportunities for growth and innovation.

Contributors

Jesse Créange
VP of Business Development
Supplier Data Management

akeneo

After obtaining his degree from ESSEC in 2018, with a specialization in Finance and a certification in “Digital Disruption,” he embarked on a journey at Cyrus Conseil. There, he played a crucial role in implementing CRM software. In 2017, fueled by his innate entrepreneurial spirit and guided by his strategic insight, he co-founded Unifai alongside two other visionaries. His skill in tackling product data challenges, acquired through interactions with numerous retailers, further solidifies his position as a market specialist.



Marc Stracuzza
Director of Portfolio Strategy

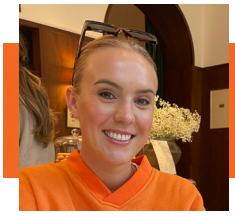
commercetools

Marc Stracuzza serves as the Director of Portfolio Strategy and has accumulated experience as a software development leader for more than 20 years. His combined focus has been on product solutions, development management, product management and product development positions.

Nilay Oza
CEO and Co-Founder

KLEVU

Nilay is an AI entrepreneur with solid experience in ecommerce technology. His passion is to make a difference through continuous learning driven software-led innovation. He thrives in leading teams across geographies and cultures.



Eve Rouse
Content Marketing Manager

nosto

Eve is the Content Marketing Manager at Nosto. She's worked in ecommerce for 5+ years and enjoys being exposed to interesting brands and seeing how shopping journeys can be made more efficient and immersive.

Henrik Feld-Jakobsen
Chief Strategy Officer

VAIMO

Guiding Vaimo's Consulting & UX division, Henrik blends strategic vision with actionable insights, driving digital transformation, CX, and business development initiatives together with a team of 75 global experts.