Overcome
data challenges in CPG

Leveraging AI for product
content success

Table of contents

CPG, the products we all know and love

Whether it's your daily grocery shopping, last-minute run to the convenience store, or annual restocking of supplies – we're all well-acquainted with consumer packaged goods. CPGs are those Doritos you love, that toothpaste your dentist recommended, the ballpoint pen buried at the bottom of your purse, and your dog's favorite treat… they're the goods that keep society functioning and whose purchases determine your lifestyle choices.

Not only is CPG the most familiar industry, but it's also the most robust. It includes essentials like toilet paper and nice-to-haves like nail polish, as well as fast-moving (FMCG) products like milk and slow-moving (SMCG) items like refrigerators. This versatility makes it an exciting space in commerce, rich with opportunities to expand to more diverse audiences, introduce new products, and experiment with emerging technologies. And despite economic headwinds, CPG brands intend to grow their product volume this year, bringing more opportunities for promotional spending. According to a 2024 Deloitte survey of the largest 100 public consumer product companies, 68% of executives said they will increase advertising and marketing spending as a percentage of their revenue.

Product categories within the CPG industry

- Food and beverage
- Health & Beauty
- Pet
- Cleaning supplies
- Paper products and office supplies
- Houseware
- Toiletries

Fast-moving consumer goods (FMCG) vs. slow-moving consumer goods (SMCG)

FMCG products have a short shelf life and only last about a year, so consumers buy these products more frequently as a recurring expenditure. FMCGs include categories such as food and beverages, personal care, cleaning products, apparel and footwear, tobacco, and pet care.

SMCG products are meant to last longer than a year, such as household appliances, furniture, and home improvement products. These items have a lower sales frequency and are not rotating as rapidly as FMCG.

Top 5 trends for CPG

The current trends and priorities in CPG are almost as fast-moving as its goods. Supply and demand levels have been riding a wild wave over the past few years, which has caused a lot of disruption in the space. Top that off with significant changes in consumer spending, and you're looking at a completely new landscape to market and sell to today's shoppers. To maintain and gain CPG market share in the modern era, you first need to understand the underlying trends.

5 consumer trends that are transforming CPG this year

⤤ **Increased demand for DTC:** According to a PwC study, 63% of consumers have said they purchased products directly from a brand's website in 2023, and that number is expected to grow this year. In turn, CPG companies are investing in ecommerce capabilities and establishing direct-to-consumer channels. This involves building robust online platforms, optimizing supply chain logistics, and enhancing last-mile delivery solutions.

⤤ **Increased media consumption:** Consumers are using new apps, sites, and social commerce to research and purchase CPG products online. In response, CPG companies are further investing in digital marketing strategies to reach and engage with consumers. This could include collaborations with social media influencers and content creators to promote their products and enhance brand visibility.

⤤ **Increased interest in health:** Consumer demand for "clean" and healthier products has been steadily rising. CPG companies are reformulating products to reduce artificial ingredients, incorporating functional and natural ingredients, and offering organic and plant-based options. There's also an increased focus on labeling transparency to provide consumers with more information about the nutritional content and sourcing of products.

⤤ **Increased interest in sustainability:** Environmental concerns are increasingly influencing consumer purchasing decisions. CPG companies are now expected to adopt more sustainable packaging solutions, such as biodegradable materials, recyclable packaging, and reduced plastics. Additionally, there's a greater emphasis on reducing food waste and promoting circular economy initiatives.

⤤ **Increased personalization:** Consumers are seeking personalized experiences and products tailored to their specific needs and preferences. CPG companies are leveraging data analytics, AI, and machine learning to gain insights into consumer behavior and offer personalized recommendations and product offerings. This involves customized packaging, product formulations, and targeted marketing campaigns.

CPG is nothing without its product content

Despite the many changes to CPG, these evolving consumer trends all have something in common – the reliance on high-quality product content. Whether you want to open a DTC store for your brand, create personalized Instagram ads, or include sustainability and nutritional information on labels, your product data needs to be accurate, up-to-date, and compliant with industry standards.

But product data excellence isn't just about capitalizing on current trends. CPG brands face severe business risks if their product content doesn't reflect the correct information, like pricing discrepancies, outdated stock levels, unclear images, missing ingredients, lack of ecological badges like Fairtrade, and allergen warnings.

Inaccuracies in CPG product data lead to...

Health risks for consumers: Product information related to CPG products plays an important role in ensuring consumers use safe products. If a harmful chemical isn't marked in a beauty product or a food item doesn't clearly state there's a risk of nut contamination, consumers could have a severe allergic reaction or worse.

Regulatory fines: CPG products are highly regulated for sanitation, safety, and ethical purposes. For instance, a simple pricing mishap could have a huge impact on the food chain's supply and demand charts, and a missing ingredient could cause a major health crisis. Companies are required by law to make certain information available to consumers, and if they fail to meet these standards, they face high regulatory fines.

Decrease in online conversion: Inaccurate product data often leads to lost sales. If an ad directs a shopper to a product that's out of stock, that shopper will find a competitor to complete the purchase with. The same thing goes when consumers come across discrepancies in product descriptions or images – more traffic is driven to other brands and retailers with consistent data. To create a successful end-to-end shopping journey, brands need to provide consumers with high-quality, accurate data at every single touchpoint, from product discovery all the way to the point of purchase.

Damage to brand reputation: Failure to provide excellent product content can create long-term damage to brand reputation. When consumers can't find the product information they're looking for or encounter mistakes, all trust is broken. Consumers need evidence that the brand is legitimate and the product is reliable, especially when it comes to online shopping. Providing high-quality product information is essential to building good rapport and maintaining brand loyalty.

What to watch: Digital product passports

The EU's CIRPASS initiative will soon require companies to provide product information for certain categories bundled electronically to make them easier to track within the circular economy.

# What makes perfecting product content so difficult?

If it was easy, everyone would do it. Unfortunately, the process of sourcing, enhancing, exporting, and maintaining product content has become quite complex.

Challenges CPG brands need to overcome to create perfect product content

Manual processes:
Creating accurate product content often involves manual data entry and verification. This is a slow and labor-intensive process, especially for CPG brands that offer a wide range of products. Plus, manual data entry is susceptible to human error, such as typos, inconsistencies, or missing information.
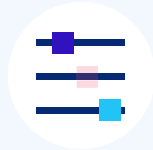
Lack of control over data:
CPG brands often have product data scattered across various systems. This fragmented data makes it challenging to maintain consistency and accuracy in product content across channels. Different departments usually have their own databases, leading to discrepancies. And if a brand operates internationally, it must also manage product content in multiple languages. Ensuring that translations are accurate and culturally appropriate adds further complexity to the content creation process.

Evolving standards and regulations:
Regulators are increasingly cracking down on what, where, and how product information is disclosed to consumers to build more transparency into supply chain processes. These laws are constantly changing and vary country-to-country. Not only does this impact brands on a production level, but it also requires them to make constant updates to their listings, labels, ads, and other marketing assets.

Lack of data synchronization:
CPG brands work with various stakeholders, including suppliers, distributors, retailers, and ecommerce platforms. Ensuring that all these parties have access to accurate and up-to-date product content – in the stakeholder's preferred format – is a logistical nightmare.

Solving product data challenges with AI

To simplify the process of managing product content, CPG brands need to gain more governance and agility within their operations. This can be achieved through the power of AI.

Let's look at some of the advanced AI technologies that can be used to transform the process of capturing and enhancing product data.

Smart data capture: By combining optical character recognition (OCR) and AI models, brands can automatically recognize texts in imported product labels, images, and other documents. All product data can be captured in seconds and immediately available.

Complex visual extraction: Capturing written data is one thing, but sourcing intricate visuals is just as important – and even more difficult. CPG brands can use customized computer vision models that are specifically designed to extract logos and other visual elements, guaranteeing accuracy and precision are maintained.

Multilingual data recognition: Scaling product content globally requires CPG brands to work with data in multiple languages. AI can be engineered to understand up to 50 languages, removing cross-border product data challenges.

Diverse product recognition: In addition to removing geographical barriers, AI can enable CPG brands to scale their operations by recognizing an infinite number of product types. This makes AI-powered data capture suitable for all businesses and industries.

GS1-certification: One of the most powerful use cases of AI in regards to CPG product content is capturing data according to GS1 standards. The GS1 System of Standards is the most widely used information standard in the world and uniquely identifies products, services, assets, and locations worldwide to support supply chain visibility and efficiency. The most obvious example of a GS1 standard is the barcode.

Driving value with AI-powered data capture

Using AI for product data capture, brands not only meet the evolving demands of the CPG market but also thrive in an increasingly competitive landscape. CPG companies stand to gain the following benefits:

➤ **Improve global data quality:** Ensuring adherence to the most up-to-date data standards and fulfilling all retailer prerequisites guarantees that CPG brands can rely on exceptionally precise and error-free data.

➤ **Accelerate time-to-market:** Streamlining manual processes through automation enables CPG brands to significantly reduce the time required to make data accessible in accordance with GS1 standards.

➤ **Cut costs:** Eliminating the need for physical products in data collection eliminates associated transportation and logistical expenses.

➤ **Grow revenue:** With higher quality data available to more trading partners, CPG brands can expand their audience reach, while improving the customer experience. This enables brands to sell better and faster.

➤ **Scale quickly:** At the rate that product assortments grow and product data changes occur, capturing and certifying product data through automated processes empowers brands to scale quickly.
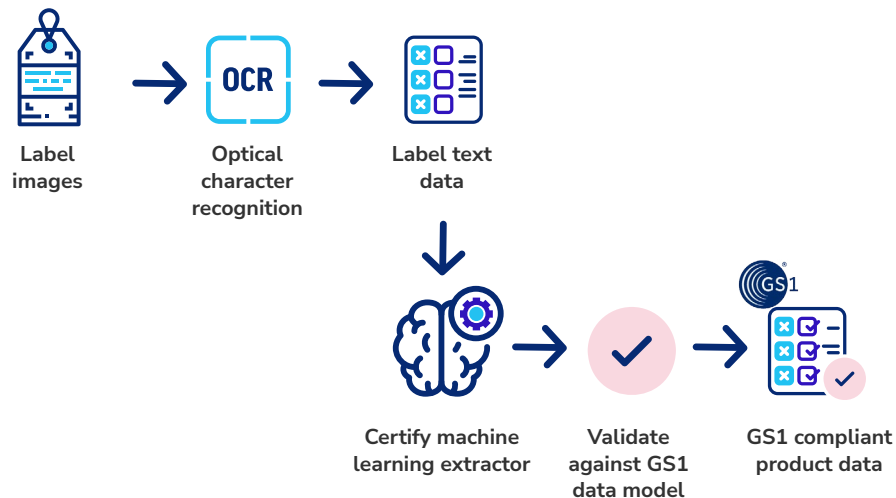
Productsup's Product Guard PX

Productsup's P2C platform is built with advanced AI capabilities and a central management view that streamlines product content journeys. Using its Product Guard PX offering, CPG brands are equipped to master their product data challenges.

What is Product Guard PX?

Product Guard PX enables brands and manufacturers to make their product data readily available for syndication to all retailers, distributors, marketplaces, and data pools in any required format, securely and quickly. Backed by highly-intelligent optical character recognition (OCR) and AI models, it allows CPG brands to capture all types of product data from any product label or artwork, and in any language or category.

Label images → Optical character recognition → Label text data

Certify machine learning extractor → Validate against GS1 data model → GS1 compliant product data

Product Guard PX and GS1 certification

Product Guard PX is certified by GS1 to conduct services powered by AI and OCR. The models are trained in line with GS1 to extract all relevant information from product labels and receive GS1 certification within 48 hours. As a GS1 partner connected with 39 data pools globally, Productsup's customers can make all of their product information automatically available to all trading partners in the world securely and efficiently.

"Many of today's retailers only accept GS1-certified product data. But complying with GS1 data standards is very difficult for brands, as there are thousands of unique standards within data pools globally. It's an extremely time-consuming, resource-intensive, and error-prone process that requires ongoing maintenance to keep up with changes to packaging and ingredients. That's why we've engineered the Productsup platform to make data sharing as easy as possible for our customers and safeguard their brand reputation and operational efficiency." – Marcel Hollerbach, Chief Innovation Officer at Productsup

CPG brands on the path to success

[Haleon](#), formerly GlaxoSmithKline (GSK), is a leading global healthcare products company known for brands like Sensodyne, Advil, and Panadol. It faced challenges in accurately syndicating product data to European retailers like Carrefour and Coop, particularly due to strict healthcare industry regulations. Haleon needed a solution to manage large volumes of product content across multiple languages and retailers without risking legal issues or slowing expansion.

Leveraging Product Guard PX and Retail PX through the Productsup P2C platform, Haleon can now manage and optimize its product data effectively and has gained access to all GS1 global data pools. With full control over its product content, Haleon can easily maintain compliance and consistency for 34,000 products across 8 countries, 30 channels, and 60 networks.

Learn more about how Haleon has transformed the way it manages its product content [here](#).

"Retail PX and Product Guard PX gave us easy access to GDSN and enabled us to quickly deliver legally compliant, on-brand messaging to all of our retail partners in a fraction of the time we used to take. The Productsup platform is so easy-to-use that we can easily enhance and tailor our data in multiple languages and countries, ensuring consistent branding for all of our products."
Hanneke Vis, eCommerce Manager for Haleon Netherlands

"With Productsup, we published more than 200 products online in GS1 within 48 hours!" – Maurice Jacobs, Head eCommerce at Golden Naturals

"Productsup helps us to optimize our product data and visuals for our retailers, drugstores, and pure players. As a result, we ensure consumers are correctly informed and that we provide optimized customer journeys."
Harry Miltenburg, National Account Manager & eCommerce lead at Bayer Consumer Health

"Productsup is a reliable partner that can deliver on short deadlines. They helped us publish all our data within 24 hours."
Sander Breedveld, Co-Founder Soilmates

Additional resources

Additional resources

Keep reading:

Visit Productsup's website for more information on _Product Guard PX_ and the full extent of Productsup's Product-to-Consumer (P2C) platform capabilities.

Book a demo:

See Product Guard PX in action by _booking a demo_ with the Productsup team.

Get in touch:

Contact our team to have your questions answered and discover how Product Guard PX can support your business.

Productsup

Empowering commerce

Get in touch today!

hello@productsup.com

www.productsup.com