



Digital Depth Analysis: The e-commerce experience audit

How retailers have improved the digital shelf, where they still trail, and how to better serve shoppers through search, product detail pages, personalization, and more.



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Executive summary

In the days before the pandemic, navigating a digital shopping experience had its challenges; particularly within grocery, where finding products down an “endless digital aisle” was cumbersome, and lack of product information proved frustrating. Several retailers were quick to advance their e-commerce capabilities during the pandemic with online shopping at an all-time high; however, many retailers are falling short of shopper expectations and lack tools to aid in the product discovery and engagement process.

Second to this online acceleration is the rise of the need-based shopper, otherwise known as the “conscious shopper.” The conscious shopper may be seeking out products that are better for themselves, the planet, the communities around them, or some combination of the three. The ever-changing conscious shopper puts an increased pressure on retailers to provide full product transparency through accurate product discoverability both in-store and online, and robust product content.

In other words, it is up to retailers to ensure shoppers can find the products they’re seeking, assist shoppers to research, understand, and add those products to their carts with confidence, and provide a personalized experience through recommendations, custom attributes, and more. NielsenIQ’s latest report, Digital Depth Analysis: The e-commerce experience audit, looks at how well retailers are achieving these online needs.

When it comes to wellness, especially, retailers are in a unique position; it is their responsibility to empower shoppers with accurate content to aid the shopper’s journey from beginning to end. According to a recent NielsenIQ 2022 Consumer Outlook online survey, nearly three-fourths of the global respondents said their priorities and shopping habits changed due to the pandemic, and a third said their priorities around wellness are much different than they were in 2019. It is obvious that consumer priorities have shifted over the past few years, but how have retailers stepped up to address the shoppers’ evolving priorities and what more can the industry do?

Two years ago, Label Insight, now a NielsenIQ company, released its first ground-breaking study—Empty Aisles:

Auditing Criteria

Advanced Filters

How retailers returned accurate and complete product assortments based on shopper need states in the form of advanced filters or wellness based filters.

Organic Search

How retailers returned accurate and complete product assortments based on shopper need states in the form of organic search or free text search.

Product Detail Page Content

How complete product detail pages were with images, core product content, iconography, product recommendations, product replacement suggestions, and below the fold media.

Personalization and Wellness

How personalized program initiatives were on retailer websites through health and wellness programs, shop-with-dietitian programs, meal planning, etc.

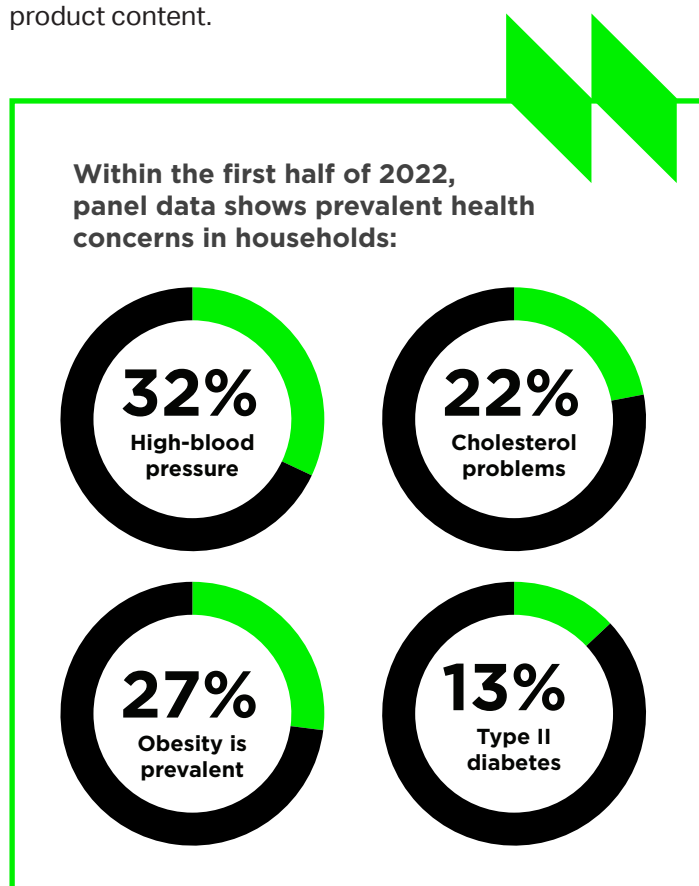
The Grocery E-Commerce Shopability Audit—reviewing 30 retailers and assessing their ability to return accurate and complete product assortments across shopper need states, such as “gluten-free.” In late 2020, that report revealed audited retailers’ websites on average failed to return 92% of qualifying products in their assortment based on the selected need state.

In May 2022, NielsenIQ Brand Bank and Label Insight completed a new and enhanced audit of the 40 top retailers analyzing the holistic shopper journey. The study delivers a follow up to need state product discovery, but dives further into how well retailers share information on product pages and throughout the site, studying iconography, product imagery, nutrition label information, web pages dedicated to insights from a dietitian or on sustainability initiatives, and more. The NielsenIQ Digital Depth Analysis audited retailers based on the following criteria:



- **Advanced Filters:** Retailers ability to return accurate and complete product assortments based on shopper need states in the form of advanced filters or wellness based filters.
- **Organic Search:** Retailers ability to return accurate and complete product assortments based on shopper need states in the form of organic search or free text search.
- **Product Detail Page Content:** How complete product detail pages were with images, core product content, iconography, product recommendations, product replacement suggestions, and below the fold media.
- **Personalization and Wellness:** Retailers personalized program initiatives through health and wellness programs, shop-with-dietitian programs, meal planning, etc.

Compared to the first report, retailers have shown some improvement around product discoverability based on shopper need states. However, the enhanced report reveals that retailers have a long way to go to engage and empower their shoppers with complete and compelling product content.



The confluence of macro trends at this point in time—massive uptake in the adoption of e-commerce and a crescendo of consumer interest in wellness attributes—means retailers and CPG brand partners are at a critical point in bringing a transparent and impactful online experience to shoppers. They need to prioritize how they get a robust set of products with wellness attributes available on their digital shelves, as well as ensure they are providing the shopper with full product transparency, to seize today's opportunity.

This new report, Digital Depth Analysis: The e-commerce experience audit, shares more in-depth analysis on how retailers are aiding shoppers in finding products that fit dietary needs, sustainability measures, and more. Additionally, the study assesses the completeness of their e-commerce product content and dives into four ways retailers can improve reaching conscious consumers online.

Introduction

In June 2020, a record 46 million shoppers purchased groceries online for either pickup or delivery in the United States, up from 16 million shoppers the year prior. The COVID-19 pandemic put e-commerce into top gear.

At the same time, the pandemic put an emphasis on health—and likely increased the number of shoppers seeking out products that fit a healthier and more sustainable lifestyle. NielsenIQ consumer panel data suggests consumer health is at an all-time risk with many diet related comorbidities on the rise, indicating an increased need for help online. Within the first half of 2022, panel data shows obesity is prevalent in 27% of households, and there are additional health concerns across households: high-blood pressure (32%), cholesterol problems (22%), pre-diabetes (6%) and type II diabetes (13%).

These factors compounded by households with allergy conditions or lifestyle concerns, as well as environmental and sustainability concerns on the rise, are upping the demand for transparency in products online. Millions of shoppers today are headed online to search for products to satisfy a health or lifestyle plan (for example, no sugar added), a diet (keto), allergy issue (peanut-free) or lifestyle concern (cruelty free).



Additionally, consumers are expecting help with discovering and understanding products. In fact, 77% of U.S. shoppers expect product labels to be more specific and transparent¹; 69% feel there should be regulation that ensures fresh and healthy foods are available to all citizens;² and nearly 60% also feel governments should more closely regulate businesses to help consumers make healthier choices³.

It is clear that consumers are demanding this information, and soon retailers may be required by law to provide much of this information. On Aug. 3, 2021, the U.S. Congress introduced an amendment to the Federal Food, Drug, and Cosmetic Act aimed at strengthening and modernizing the requirements related to food labels, which directly impact grocery sales online. The amendment, known as the Food Labeling Modernization Act of 2021, requires all label or labeling information, including ingredients, nutrition data, and allergen information, to be available for grocery items sold online.

This update is long overdue and with the growth in online grocery shopping, which is showing no signs of slowing down, retailers need to strengthen how they deliver product information online.

The problem that both brands and retailers face at brick-and-mortar locations is that there is only so much space available to inform shoppers. For brands, this could be due to a limitation around packaging label space, shelf tag space, or promotional space in stores—and a veritable impossibility to truly personalize packaging content relevant to all shopper need states. On the other hand, digital space is ultimately limitless, and retailers can leverage product pages, graphics, search features, and more to deliver a personalized shopper experience. But there's work to be done.

The 2020 audit revealed—among the reviewed retailer websites—92% of qualifying products failed to return based on common search terms. Said another way, only one product for every 10 that qualified were returned. That means consumers looking for “vegan” products were served a woefully limited digital aisle.

This year's results showed some improvement, however. The new 2022 audit found that the retailers are still

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Even more concerning, beyond a general gap in the discovery of products online, the audit reveals retailers have a major lack of essential product information to be found on the digital shelf:

- **38%** have one or zero product images per product displayed online
- **24%** are missing ingredient statements on more than half of food and beverage product detail pages
- **29%** are missing nutrition fact panels on more than half of their food and beverage product detail pages
- **50%** lack providing any type of iconography on product detail pages

A NielsenIQ shopper segmentation study found 64% of shoppers have brand-switched from a frequently purchased brand to another brand that provides more in-depth product information, beyond what is provided on the physical label, and NielsenIQ research discovered that 84% of brands have failed to claim at least one of the top three most-searched attributes. Those two stats combined are a recipe for declining brand loyalty. If brands and retailers don't improve how they deliver this information, they will lose shoppers.

Let's dig deeper into where retailers are falling behind online and how they can improve the shopper experience.



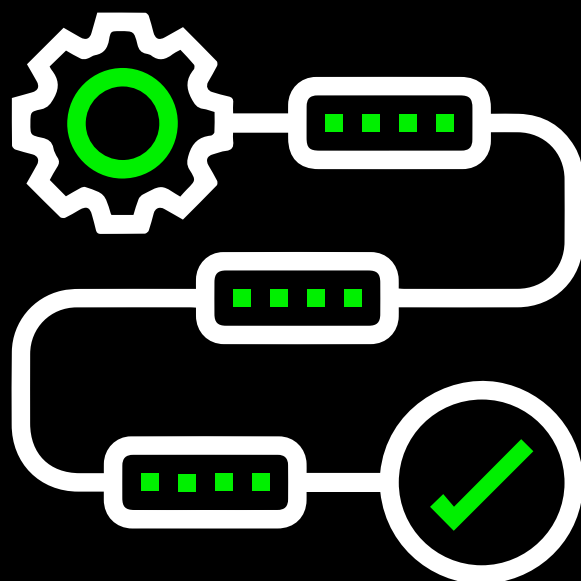


Methodology

The auditors started by identifying top retailers that are key players in the grocery, health and beauty, and pet industries, according to both reputation and revenue. The retailers were leading supermarkets, mass merchants, pet, and health and beauty stores.

Next, any retailer using Instacart, Shipt, or DoorDash as a singular source for e-commerce was excluded, as results would have skewed the data and provided inaccurate results.

Of those top retailers, 40 chains were selected with an operational e-commerce experience. Amazon was excluded from this audit as they are too large to determine accurate product discoverability metrics.





Retailers Audited

Grocery 
Food Lion
Albertsons
ALDI
Giant Eagle
H-E-B
Hy-Vee
Kroger
Meijer
Price Chopper
Publix
Raley's
Rouses Markets
Smart & Final
Harvey's Supermarket
Family Fare
Target
Cub Foods
United Supermarkets
ShopRite
Walmart
Wegmans
Weis Markets

Pet 
Chewy
Petco
PetSmart

Wholesale Club 
BJ's Wholesale Club
Costco
Sam's Club

Drug 
CVS
Rite Aid
Walgreens

Health & Beauty 
Sally Beauty
Sephora
Ulta

Natural/ Specialty 
Fresh Market
Fresh Thyme
Sprouts Farmers Market
Whole Foods

Discount/ Dollar Store 
Dollar General
Family Dollar





Advanced Filters

For this portion of the audit, only retailers offering advanced filters were included, enabling shoppers to check a search box or filter for specific wellness attributes such as "gluten-free," "organic," "clean," etc. The number of products that qualified for each filter - and the number of total products - were recorded to reach a percentage of the retailers assortment that qualified for the filter. This percentage was then compared to the percentage of products within NielsenIQ Personalized Product Experience database that matched the same filter for both on-package and derived data. For retailers with a more natural product assortment (Sprouts, Whole Foods, Fresh Thyme, and Fresh Market) a subset of products was identified within the NielsenIQ Label Insight database to align more closely with these retailers' product assortment and then compared the percentage of total products within that set of products with the same filter for on-package and derived data.

Organic Search

To look at organic search or free word searches, the study aimed to determine the completeness and accuracy of products returned when searching common attributes. Various attributes were searched for and the total number of products returned - and the number of total products - were recorded to

reach a percentage of the retailers assortment that returned for this organic search term. This percentage was then compared to the percentage of products within NielsenIQ Personalized Product Experience database that matched the same organic search term for both on-package and derived data.

Subject matter experts in the ingredient and nutrition industry audited the results of the organic searches to determine the accuracy of the products returned in correlation to the search. They reviewed as such:

- **Accurate**—indicated that the returned products corresponded to the search;
- **Semi-Accurate**—indicated that a portion of the products that returned corresponded to the search term, while a portion did not correspond to the search;
- **Inaccurate**—indicated that the returned products did not correspond to the search;
- **No Products Returned**—indicated the retailer returned zero products for the search.

To identify what organic searches to audit, search panel data was leveraged to uncover top health and wellness searches in food and beverage, pet food, and personal care departments. The following attributes were identified for each department, and included below is how frequently they have been searched over the past year across channels, as well as the conversion rates for these searches across channels.

Product Type ⁴	Search Phrase	Annual Searches	Conversion Rate
Food & Beverage 	"vegan cheese"	967,279	11.5%
	"gluten free bread"	1,223,678	13.6%
	"sugar free cookies"	355,682	12.7%
	"keto bread"	718,327	10.9%
Pet Food 	"grain free cat food"	67,909	18.5%
	"limited ingredient dog food"	12,557	11.9%
	"organic dog treats"	21,992	19.6%
	"natural pet treats"	9,918	28.8%
Personal Care 	"sulfate free shampoo"	181,670	11.8%
	"vegan makeup"	6,331	4.8%
	"paraben free shampoo"	18,334	9.3%
	"oil free makeup remover"	6,088	17.1%



Product Detail Pages

For each product type (food and beverage, pet food, personal care) included in the report, the study audited three categories with 15 products in each category to reach a total of 45 audited product detail pages per product type for each retailer. When filtering on one of the three chosen categories, five products were audited on the first page, five products were audited on the middle page, and five products were audited on the last page. This was to ensure that if a retailer was prioritizing products with complete product information that it factored in a more complete view of the quality and completeness of their overall e-commerce experience. If the retailer did not have their site paginated, and instead had an option to “browse more” that was continually clicked until the end was reached, serving as the “last page.”

The following categories or like categories were audited for each product type:

- **Food and Beverage:** Snacks (Chips and Pretzels); Frozen (Appetizers and Sides); Beverages (Soft Drinks)
- **Personal Care:** Deodorants and Antiperspirants; Hair Care (Shampoo); Skin Care (Body Lotions and Creams)
- **Pet Food:** Dog Treats; Dry Dog Food; Wet Cat Food

On each product detail page, the number of product images were identified and the team designated if the following were present:

- Ingredient statement
- Warning statement
- Nutrition fact panel
- Attribute iconography
- Below the fold media such as video, feature set, lifestyle imagery
- Product recommendations and replacements

Furthermore, for the product recommendations and replacements, the study looked to discover what methodology the retailer was using to determine recommended products or replacements such as same brand, similar products, different brands, etc.



Health and Wellness Program

Because of the current uptick in wellness-focused shoppers, the report also analyzed retailers' sites for dedicated pages or features associated with specific programs, such as how shoppers could find more overarching statements on the retailers' sustainability initiatives, philanthropy, diversity and inclusion sections, wellness landing pages with recipes and meal planning, including personalized programs such as shopping along with a dietitian or accessing a virtual chat.

This search also analyzed whether the retailers had an iconography library or definition guide that defined the health and wellness terms and icons or if they were working with a third party data provide the terms and icons.





Key Findings

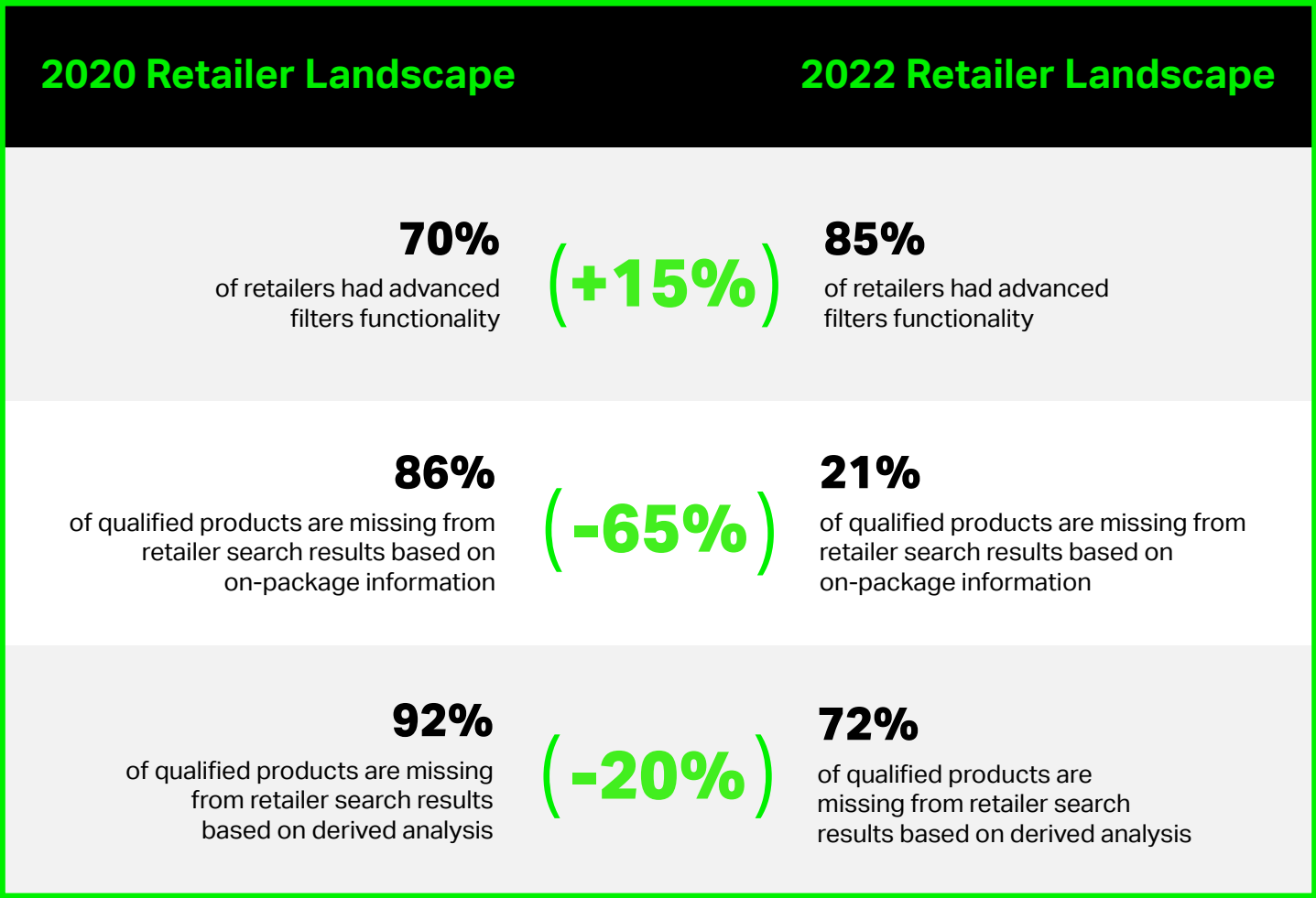
First, let's compare the two reports. The inaugural report was released in September 2020, compiling data from 30 retailers across grocery, health and beauty, and pet. Nearly 70% of the audited retailers offered an advanced filters function on their site.

The updated report studied 40 retailers across the same categories in May 2022, finding 85% of the audited retailers offer an advanced filters function on their site—a 15% increase in retailers offering advanced filters or smart filters online.

Of the 40 retailers, on average, the retailers have 18 food and beverage wellness-focused advanced filters filters, 76 pet filters, and 57 personal care filters.

The most dramatic improvement over the past two years to report: advanced filters for returning products for each need state based on on-package data. The 2022 analysis of the 34 retailers with advanced filters, reveals that on average nearly 80% of qualified products, based on label information on-package, returned when filtering for the need state. This is a huge leap from the initial study when only 14% of products were returned based on on-package label information among the 21 retailers with advanced filters.

A reason for the improvement could be that CPG brands are working better to supply the right information to retailers and/or retail chains are capturing the core content of a product, including its on-package claim information, and getting it in front of shoppers.





The audit, also provides key findings in advanced areas such as organic search, how often imagery and iconography is shared, how label information is delivered, and more.

Some expanded key findings:

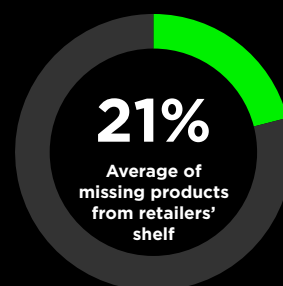
- **Nutrition Data:** 29% are missing a nutrition fact panel on nearly half their products;
- **Site Imagery:** 40% of the retailers on average show two or less images per product on their product detail pages;
- **Media Opportunities:** only 30% of the retailers have any presence of “below the fold” media anywhere on their websites;
- **Product Recommendations:** 20% of retailers do not have product recommendations and replacements available on their site for the majority of audited products;
- **Custom Filters:** 35% of the retailers have custom attributes on their site available within the search filter.

In four parts, Digital Depth Analysis: The e-commerce experience audit, addresses how retailers can improve their online experience through enhanced advanced filters, detailed product pages, engaging content, and personalized programs.



Some other key findings from the core research:

Label information for on-package data results:



Derived data from the ingredient statement and nutrition fact panel results:



On average, across the top 25 most prevalent attributes searched, retailers failed to return 68% of qualifying products on their digital storefronts, indicating their is a relatively large gap for those heavy hitter attributes.



Part 1: Enhanced Discovery, Deliver Rich Attribution

Consumers are searching retailer websites for products based on a range of health and wellness attributes at a tremendous pace. NielsenIQ quantified web searches year over year for two of the more established attributes, "organic" and "plant based," and found searches for products with these claims have increased between 2020 and 2021 by 163% and 148%, respectively.

With searches up that much, brands and retailers need to work together to make it easier to find those products. Strategies could include prioritizing relevant content and searchable attributes, enhancing product pages with attribution, as well as working together on strategies that formulate how content is set up, how it is categorized, how it defines the taxonomy, and how it integrates multi-media content.

Advanced Filters

Often, the first function a retailer tackles when it comes to implementing digital attribution is developing advanced filters. This is a direct signal to shoppers that

the retailer has identified the attributes around wellness that matter to their shoppers, prioritized the shopper's need states, and made it clear the retailer is focused on making the e-commerce experience easy.

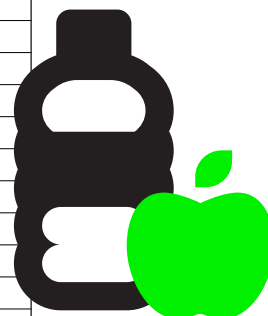
This function will remain paramount to a retailer's success with delivering a personalized experience to shoppers. Leveraging the right data, retailers have a massive opportunity to pinpoint the right attributes that speak to their shopper base and deliver an exceptional shopping experience.

Of the retailers reviewed, the top-ranking attributes appearing the most include: "gluten free," "organic," and "vegan." Those more established attributes were found on nearly all of the retailer websites audited. Examples of less-established attributes found on just a few retailers include: "antioxidants," "low FODMAP," and "local."

And among nearly all of the attributes ranked, sales are up for those products, with some increasing dramatically such as "keto" in the food and beverage category, seeing a 265% jump in sales compared to three years ago, and the attribute "vegan" is up 102% in sales compared to three years ago in the personal care space. Other large sales gains over the three-year period in food and beverage attributes include "sugar free" up 44.5%, "soy free" up 54%, and "low carb" up nearly 70%.⁵ On this page is a list of the top attributes in the food and beverage, personal care, and pet food space.

Food & Beverage Attribute ⁶	Average % of Products Missing	Annual Sales	Average Missed Dollars	% Sales Growth (1 Year)
Gluten Free	67.3%	\$118B	\$79.3B	6.7%
Organic	35.8%	\$30.6B	\$11.0B	3.7%
Vegan	74.8%	\$15.2B	\$11.3B	9.8%
Kosher	43.9%	\$232B	\$102.1B	4.7%
Sugar Free	53.1%	\$15.9B	\$8.4B	15.5%
Low Sodium	77.1%	\$7.2B	\$5.6B	9.2%
Lactose Free	96.9%	\$10.2B	\$9.9B	5.2%
Non-GMO	0.0%	\$57.6B	\$0.0	5.9%
Dairy Free	87.5%	\$8.3B	\$7.3B	9.8%
Low Fat/Fat Free	84.2%	\$33.5B	\$28.2B	0.7%
Vegetarian	63.9%	\$4.0B	\$2.6B	7.5%
Heart Healthy	47.7%	\$26.6B	\$14.1B	1.6%
Keto	33.9%	\$1.6B	\$554M	27.4%
Natural/ Artificial Free	69.8%	\$180.5B	\$126.0B	4.9%
Whole Grain	43.6%	\$17.5B	\$7.6B	2.7%
Low Carb	26.8%	\$2.41B	\$644M	9.8%
Caffeine Free	99.0%	\$10.2B	\$10.1B	11.4%
Soy Free	98.3%	\$4.6B	\$4.6B	9.8%
Peanut Free	98.0%	\$5.5B	\$5.5B	7.0%
No Added Sugar	87.3%	\$9.9B	\$8.7B	7.8%

Food & Beverage attributes that were present across 7 or more retailers





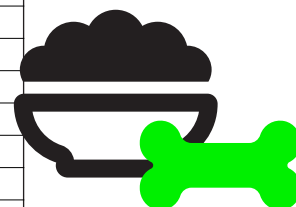
Personal Care Attribute ⁷	Average % of Products Missing	Annual Sales	Average Missed Dollars	% Sales Growth (1 Year)
Gluten Free	91.7%	\$1.2B	\$1.1B	10.3%
Natural/ Artificial Free	0.0%	\$2.8B	\$0.0	6.2%
Paraben Free	71.2%	\$8.2B	\$5.9B	11.3%
Fragrance Free	25.6%	\$3.7B	\$938M	11.9%
Sulfate Free	81.2%	\$3.3B	\$2.7B	9.8%
Vegan	64.1%	\$2.8B	\$1.8B	18.5%
Organic	72.5%	\$626M	\$454M	-4.8%
Cruelty Free	22.4%	\$6.3B	\$1.4B	18.9%
Sensitive Skin	0.0%	\$1.6B	\$0.0	1.9%
Dry (Skin Type)	0.0%	\$1.9B	\$0.0	4.7%
Oil Free	87.6%	\$1.4B	\$1.2B	0.2%

Personal Care attributes that were present across 5 or more retailers



Pet Food Attribute ⁸	Average % of Products Missing	Annual Sales	Average Missed Dollars	% Sales Growth (1 Year)
Urinary Health	0.0%	\$72.6M	\$0.0	9.2%
Organic	0.0%	\$42.0M	\$0.0	6.2%
Lamb	0.0%	\$707M	\$0.0	11.0%
Beef	0.0%	\$5.7B	\$0.0	7.5%
Skin and Coat Health	35.5%	\$5.1B	\$1.8B	13.9%
Chicken	7.8%	\$11.3B	\$881M	9.2%
Weight Management	0.0%	\$1.1B	\$0.00	8.3%
Dental Care	42.2%	\$4.3B	\$1.8B	14.7%
Liver Health	0.0%	\$5,963	\$0.0	35.7%
Digestive Health	55.4%	\$3.5B	\$1.2B	12.3%
Pork	80.7%	\$1.5B	\$1.2B	11.1%
Duck	0.0%	\$275M	\$0.0	4.9%
Fish	60.0%	\$5.2B	\$3.1B	12.7%
Turkey	0.0%	\$2.0B	\$0.0	11.7%

Pet Food attributes that were present across 5 or more retailers



Though retailers have addressed many dietary and allergen needs online that are growing sales significantly, there are many lifestyle preferences that continue to be overlooked by retailers, with sustainability being a large gap and high-growth opportunity for retailers. The leading sustainability filters found on retailers online sites include "cruelty free" (7 retailers), "sustainable" (3 retailers), and "grass fed" (3 retailers). All others only appear once

or not at all on the retailers' sites. Hy-Vee shines among the retailers by offering several animal welfare focused attributes on their site such as "vegetarian fed," "cage free," "free range," "grass fed," and "pasture raised." The chart below illustrates just how high of a revenue opportunity sustainability attribution is across the store:

Department	Social Responsibility	Sustainable Farming	Environmental Sustainability	Sustainable Packaging	Animal Welfare
Total Store	+12.8%	+13.5%	+16.5%	+12.6%	+24.9%
Total Food & Beverage	+27.6%	+14.8%	+19.1%	+13.5%	+25.9%
BevAI	+18.9%	-0.3%	+4.8%	+13.0%	+9.7%
Vitamins/OTC	+60.8%	+12.7%	+19.7%	+5.1%	+19.6%
Beauty/Personal Care	+19.8%	-70.1%	+19.3%	+17.0%	+36.3%
Household Care	-22.9%	+35.7%	+11.3%	+9.4%	+3.3%
Pet Care	-26.4%	+599%	+4.4%	+57.0%	-5.3%



How well are retailers returning products in their assortment based on these filters?

The Digital Depth Analysis: The e-commerce experience report points to some major improvements on this topic since 2020. For retailers with advanced filters, on average, nearly 79% of products that qualified based on label information on the products packaging were returned per need state. In other words, 21% of the qualifying products that should be visible to a consumer on the digital shelf based on product claims and certifications did not appear—a major bump compared to the report two years ago.

At the same time, on-package data is just scratching the surface, as a 21% gap in coverage can still be quite significant to the shopper seeking a large selection of products that meet their needs.

From a singular category perspective, pet food is exceeding as the category returning the most products based on their assortment with the gap only being 19%.

On-Package Results

Product Type	Average Products Returned by Retailer	Average Products Missing from Retailers Shelf
Total Store	78.5%	21.5%
Food & Beverage	72.9%	27.1%
Pet Food	81.4%	18.6%
Personal Care	68.5%	31.6%

Is on-package data alone enough?

Even in just two years, especially in the case of on-package data findings, retailers have made a massive jump in ensuring that products with need-based claims and certifications are found by shoppers. There remains, however, a huge opportunity to better serve consumers via derived attribution and especially via more robust product detail pages.

However, compared against how well shoppers find products based on NielsenIQ Personalized Product Experience derived data results, the reverse occurs, with more than 72% of qualifying products missing from the digital shelf. So based on ingredient and nutrient analysis of the product, retailers are only returning 28% of the products that qualify, and there is a 72% gap in the products that should have been made available on the digital shelf that were not.



Derived Data Results

Product Type	Average Products Returned by Retailer	Average Products Missing from Retailers Shelf
Total Store	27.3%	72.3%
Food & Beverage	26.7%	73.3%
Pet Food	38.0%	62.0%
Personal Care	11.0%	89.0%

Additionally, by leveraging the derived attribution that NielsenIQ has available, retailers on average are able to return 988% more products in their assortment per filter.

How well are retailers returning products based on Organic Search?

Digital Depth Analysis: The e-commerce experience audit revealed some major gaps in organic search return on the retailers' sites. All retailers, apart from ALDI, offer organic search on their site as a way for shoppers to discover products. However, for retailers with organic search capabilities (39 retailers), on average, nearly 32% of products that qualified to be returned based on label information on the product packaging came up missing. Even more telling, based on ingredient and nutrient analysis, 87% of product that should have been made available based on the common search phrase did not appear. This means that retailers on average only return 13% of qualifying products per search term.

Also revealing, via NielsenIQ derived attribution, retailers on average are able to return almost 3,000% more products in their assortment per search term.



	On-Package Results	Derived Results
Average Products Returned by Retailer	153.1%	2,893.0%
Average Products Missing from Retailers Shelf	67.9%	12.6%
Average More Returned with Label Insight Data	32.1%	87.4%



Consumers are missing out on keto

An attribute growing at a tremendous rate is... "keto," with sales of products that claim this attribute up 27% a year ago and 265% three years ago. Looking at raw search results for "keto breads," for example, on average retailers are returning less than 1% of their assortment.

When uncovering products that are qualified to fit the keto-based diet within the NielsenIQ Label Insight database, the data shows it could increase return by over 2,000% (specifically 2,265% more). Keto is growing at a significant rate year over year, so it is essential that brands capitalize on this attribute.

Additionally, organic search in pet food proved to be incomplete. On average, for the 4 pet searches, NielsenIQ data was able to return 20.6% more products with on-package information, and 115.1% more products with derived attribution.

The audit revealed that return is limited, but are the products that returned accurate based on the search?

Overall, accuracy of return seems to be an issue for retailers:

- **42% of key searches returned "accurate" results,** with "accurate" being defined as the products that returned met the corresponding search
- **42% of searches returned were found to be "semi-accurate,"** meaning some of the products met the corresponding search but others didn't qualify or came back for a completely different category
- **12% of searches were found to be "inaccurate,"** meaning the products returned did not meet the corresponding search

To illustrate this data, in some instances, for the food and beverage searches, other products like cleaning supplies and supplements came back in the results. In other instances, "vegan cheese" or "gluten free bread," for example, were searched and only non-vegan cheese returned. This 12% can be extremely frustrating for consumers, and likely lead to mistrust for the retailer. Returning inaccurate products is not going to drive conversion and will likely cause the shopper to switch retailers.

- ▶ **1 in 3 shoppers have bought from a competitor brand because of the lack of information they received while shopping online.⁴**

12% of organic searches were found to be 'inaccurate,' meaning the products returned did not meet the corresponding search.





Part 2:

Foundational Product Content, Empower Shoppers

Research by Forrester investigated what information shoppers use when researching and making a purchasing decision and results showed that detailed product pages weild tremendous power when it comes to converting a purchase and building loyalty.

In fact, Forrester research states that 77% use the product page information when researching a purchase decision. Why? Because it includes everything from the raw product information such as ingredients, allergens and nutrients to key call outs and brand information—enough to provide a basic informed purchasing decision.

And then there are product images. Product images are viewed first from the aisle view and then more closely on the product description page. According to the Forrester survey, 63% of shoppers use product images, 61% use multiple images, and 66% rely on the ability to zoom in on these images. Missing product images or inaccurate product images is no longer acceptable. In fact, missing images make shoppers believe the product is out of stock, resulting in missed sales.

When done right, it's a landing spot for a shopper to build a relationship with a retailer. They arrive with questions, and this page should deliver the answers. But are they?

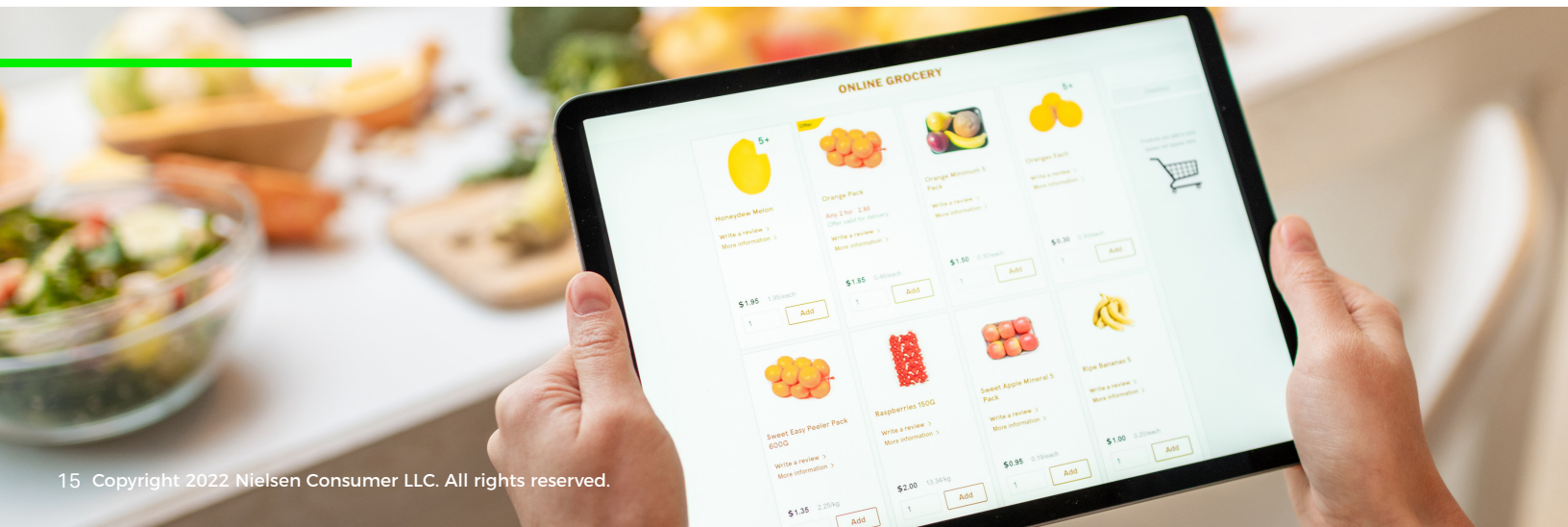
Product Images

Imagery is vital: 40% of retailers on average show less than two images per product on their. Less than a third of retailers are sharing more than four images on a product page.

Average count of images per product detail page	% Retailers Total
0-1	32.5%
Between 1-2	7.5%
Between 1-4	30.0%
>4 Images	30.0%

Whereas food and beverage drive the majority of sales for a retailer, they are also the categories falling behind in use of imagery for products. The study breaks down the average count of images per product detail page and then the percentage of retailers across food and beverage, pet food, and personal care products. Within pet food, 66% of retailers show more than four images per product, but within food and beverage, only 27% of retailers are showing more than 4 images. It is clear that retailers are prioritizing imagery for pet, but they have a long way to go in food and beverage.

Average count of images per product detail page	Food & Beverage	Pet Food	Personal Care
0-1	38.2%	0.0%	0.0%
Between 1-2	5.9%	0.0%	8.3%
Between 2-4	29.4%	33.3%	58.3%
>4 Images	26.5%	66.6%	33.3%



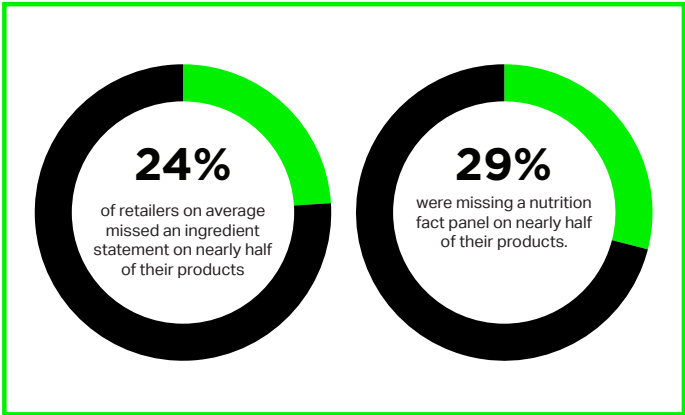


One last crucial finding: the audited retailers are prioritizing products with multiple images. Because the team audited the first page, middle page, and last page, the results highlight that on average the first page always carries the most images, followed by the middle page, and then the last. Below is breakdown of the average number of images per page type, per product type, and across retailers.

Product Type	Page Order	Average Image Count Per Page
Pet Food	First	7.02
	Middle	5.70
	Last	5.41
Personal Care	First	4.83
	Middle	3.91
	Last	3.27
Food & Beverage	First	3.06
	Middle	2.87
	Last	2.50

Ingredient Statements and Nutrition Fact Panels

Unfortunately, shoppers don’t seem to be getting enough information. On average, 23% of retailers are missing ingredient statements on more than 50% of their product detail pages. When reviewing just the food and beverage product pages, the results are even more shocking.



This lack of information is extremely concerning, and on some occasions dangerous, to individuals that require access to core product information, particularly those with comorbidities like high-blood pressure, high cholesterol and diabetes, along with those who suffer from allergies or dietary intolerances. For example, diabetic shoppers need to monitor carbohydrate and total sugar content, while gluten-free shoppers often go directly to the ingredient statement to determine if a product contains gluten ingredients. Missing this basic content online can be harmful to shoppers, eliminates a chance at conversion, and can weaken loyalty.

As described above, this should also be concerning for retailers as regulations and the Food Label Modernization Act of 2021 may soon require this level of detail for food products purchased online.

This desire for product transparency and access to ingredients information extends beyond food and beverage into personal care, pet care, and other products across the store, although the data shows personal care and pet food products are better performing in this area:

Only one pet retailer and one personal care retailer were missing ingredient statements on more than half of their product detail pages.

Iconography

Shoppers value convenience and icons are a valuable tool. It takes a relatively savvy shopper to understand how to read a nutrition fact panel or an ingredient statement, and dissect the various macro and micronutrients or ingredients that could impact a dietary choice, but an icon can do the heavy lifting.

The audit revealed that half of retailers did not have iconography present on their product detail pages - missing the mark on providing their shoppers with a more personalized experience. It’s a simple way to aid and convenience shoppers seeking products that meet their needs, who are not wanting to spend time reading a nutrition label.

Personalization is also all about convenience, saving even the savviest shopper time through recommendations based on their diet that carry meaningful icons. Health and wellness as a whole is very broad, going beyond diet, clean label, sustainability, and products that give back to the community. Icons are a way for a retailer to clearly define what they stand for, and personalization can directly relay these products to their shoppers—building trust.



A number of the audited retailers include an icon library on their site with definitions that fully explain the meaning and evoke transparency. Some standout retailers with an icon library include Wegmans, Raley's, Target, H-E-B, Publix, Family Fare, United Supermarkets and Price Chopper.

Product pages are also a direct way for CPGs and retailer's with private label brands to show they care about the consumers they're serving. According to Shiprocket, 98% of shoppers halt a purchase if the information about the product is incomplete or incorrect, and a survey by PWC found that one in three shoppers have bought a competing brand because of a lack of information present when shopping online. Shoppers who prioritize transparency will be disappointed and frustrated with an e-commerce experience that does not include displays of even basic information like a nutrition panel.

Amid the explosion of online shopping, the brands and retailers quickest to build robust product detail pages—to the standard that online shoppers have come to expect—will win in the long term.

A Forrester survey of 360 consumers across North America and Europe ranked the top three ways shoppers look to research products online:

- Detailed product descriptions and specifications
- Customer reviews
- Images

The Forrester survey also reported that 77% use the content to make a purchasing decision and they're looking to go deeper into images. The survey said 63% of shoppers use product images to make informed purchase decisions, 61% use multiple images, and 66% rely on the ability to zoom in on images.

Imagery and iconography are easy ways for retailers to deliver content, and there are also more dynamic ways such as rich media. Retailers averaging one or less image per product range from big to small, including names like Albertsons, Wegmans, H-E-B, Publix, Weis Markets, Sprouts, Giant Eagle, Raley's and others.

Retailer Icon Libraries:

- Wegmans
- Target
- H-E-B
- Publix
- Family Fare
- Price Chopper
- Raley's
- United Supermarkets





Part 3:

Shopper Engagement, Connect via Enhanced Product Content

There are endless ways to market a product online, but the most accessible and effective option is enhanced product content.

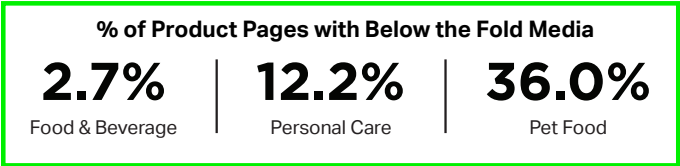
With more brands and retailers investing time and money into enhanced product content, and more shoppers doing additional product research online, it's never been more critical to invest in enhanced product content.

Insights from HingeGlobal find that 25% of shoppers are more likely to purchase when enhanced product content is made available, such as videos and other rich media content. These are tactics that support and enhance product page content, demonstrating lifestyle aspects of a product that go beyond a label or product description.

The largest online retailers encourage their brands to add rich media to their item pages, because they know it works. Amazon has reported a 5%-20% sales lift on pages featuring their form of enhanced product content, A+ Content.

Shopper interest in rich media is perhaps the most evident with product videos. It's not a secret to anyone: video content has revolutionized the internet. Studies have shown that 50% of users look for a video about a product they're interested in before making a purchase.

Despite consumers seeking this engagement, retailers aren't providing it to the extent they should.



Digital Depth Analysis: The e-commerce experience audit reviewed product pages for the first time, finding that while the audited retailers seem to be behind covering the basics like labels and product images, most are still far behind on next-level engagement tactics. Only 30% of the retailers had any presence of "below the fold" media anywhere on their websites, and of these 30% (12 retailers), below the fold media was only actually present on 26.4% of the product detail pages audited.

The graph below left reveals the percentage of product detail pages that contain any presence of below the fold media, this percentage is out of the total product detail pages audited across retailers.

It is clear that food and beverage is extremely behind in this area, and personal care is performing moderately by comparison. Pet retailers executed below the fold media the strongest, with more than a third of its audited pages having below the fold media content. Chewy and PetSmart led all retailers with 62% and nearly 58% of its pages with below the fold media, respectively. Petco wasn't far behind with 44% and Target with 45%.

Product Recommendations & Replacements

Some additional ways where retailers can offer a differentiated approach to wellness shopping includes providing meaningful and accurate product replacement options and recommendations (only 20% of the retailers audited did not leverage this tactic). Retailers can lean into technology to automate suggestions based on a shopper's history or loyalty information, as well as product attribution. Of the findings, 80% of the retailers had product recommendations and replacements on at least half of their product pages, and 18 retailers had product recommendations and replacements on 100% of its audited product detail pages.

20% of retailers did not have product recommendations and replacements available on their site for majority of audited products. What does this mean for shoppers? How will they find products to purchase instead?

For the retailers with product recommendations and replacements on their site, a majority of the recommendations turned out to be products with the same brand. More so, many recommendations represented the same brand and with a similar product title.

It is important that retailers are not only factoring in brand, product title, and product price into their replacement recommendations, but they also must consider the customer's need states. When a gluten-free shopper seeks a gluten-free bread product, but it is out of stock, and the recommendation contains gluten, this could hurt shopper loyalty. Retailers need to know their shoppers and recommend products that will fit all of their health and wellness need states, along with their budget restrictions.



Part 4:

Personalization, Offer 1-to-1 Experience

Just as rich media content can take education to another level, so can personalization. Retailers have been strengthening loyalty programs to keep shoppers coming back with programs such as recipe-building capabilities, shopping with a dietitian, and more.

A personalized approach taps into an even more unique shopping experience and enables retailers to trumpet differentiated health and wellness programs.

Retailers with in-store dietitians being highlighted on personalized landing pages include H-E-B, Publix, Hy-Vee, Weis Markets, and United Supermarkets. Many highlight wellness on focused landing pages, and through meal-planning and recipe programs online. Retailers also highlight wellness through their charitable pages, sharing the efforts they are doing to raise money or donate to organizations such as Feeding America.

Custom Attribution

Another element of a more custom approach from a retailer's point of view is offering a one-of-a-kind attribute to its advanced filters. This can especially be beneficial when promoting a retailer's private label brand, such as dedicating a search function that highlights the qualities a retailer's private label brand stands for. Retailers can also create filters around campaigns like Kroger's "Live Naturally" campaign highlighting "free from" products.

Other retailers that leverage custom attributes to differentiate often focus on whole foods or directing their consumers to better-for-you products such as:



Whole Foods and Whole Foods Diet: A diet program that helps shoppers buy more natural and plant-based foods.



H-E-B and Select Ingredients: Foods tagged with this attribute don't carry any ingredients not allowed to be part of the program as detailed on the H-E-B site. It's a focus on natural and "free from" items.



Publix and Better Choice: Publix identifies foods and stamps them with a Better Choice tag to highlight products that have more nutrients and less ingredients like saturated fats, added sodium, etc.

A personalized approach taps into an even more unique shopping experience and enables retailers to trumpet differentiated health and wellness programs.





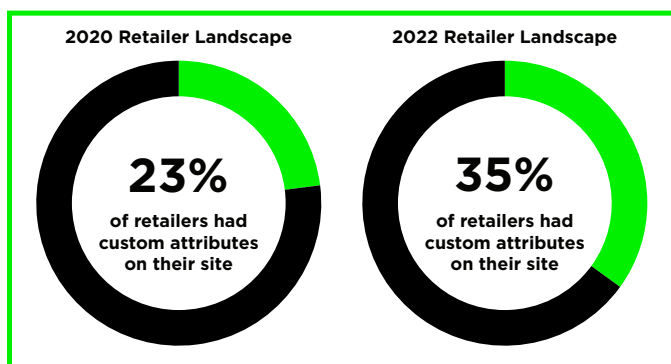
Some retailers choose to focus on directing their consumers to better-for-the-planet choices through custom attributes like:

- **Family Fare and Sustainable:** The retailer tags goods that are certified sustainable by a list of organizations such as B-Corporation, Fair Trade, Rainforest Alliance, and many more.
- **H-E-B and Go Local:** The attribute highlights the retailer's partnership with local growers and manufacturers in Texas, providing a fresher product.

The report finds many beauty retailers like Ulta, Sephora, Sally Beauty, and Target, use the term "clean" to highlight the items in their assortment that are better for you, or that do not contain the ingredients the retailer has deemed harmful. Each define clean a bit differently, but all four retailers are transparent in how they define clean and include a link on their site to the ingredients that cause a product to be eliminated from qualifying for the clean attribute. Most eliminate ingredients such as parabens, phthalates, sulfates, and several others.

How has customization changed since the previous audit?

Comparing the two reports, retailers increased strongly in terms of unique, custom attributes. In the 2020 study, 23% of the retailers had custom attributes on their site and that number increased to 35% in 2022.



How else can retailers increase personalization?

Retailers can create an even more personalized experience through other outlets such as sponsored ads based on their shopping history and profile, and factor in the attributes that matter to that shopper most.

Lastly, as discussed above, retailers can do more to share their sustainability initiatives at a more product level. The audit revealed that many retailers have sections on their

Best in Class Retailer Experiences:

The deep audit beyond search helped reveal a few retailers demonstrating exceptional experiences online:

- **Albertsons:** The retailer has three impactful ways for shoppers to search including a tool focused on baking products, a meal planner with chef-designed recipes, and a page with foods broken down by specific diets from Keto to vegan.
 - ▶ Baking at home
 - ▶ Specialty Diet
 - ▶ Meal Planning
- **H-E-B:** The chain has a service that links shoppers directly with a dietitian and has an in-depth icon and definition program.
 - ▶ Wellness and nutrition services
 - ▶ Nutrition tag definitions
- **FAMILY FARE:** The retailer has a dedicated section of its site dedicated to helping shoppers build a healthier lifestyle, including videos, blogs on healthy living and foods, and nutrition information.
 - ▶ Living Well

website dedicated to sustainability goals and missions, but it's not empowering the shopper with information to make a more informed sustainability decision on products to buy.

It's one thing for shoppers to read a platitude on sustainability, but it's another to see products highlighted that align with a retailer's sustainability goals where that purchase can have an impact on the planet.

Through in-depth label and product research, retailers can identify the products that offer more sustainability-forward goals as well as the products meeting the top attributes that matter to shoppers. They can adjust attributes and know what to highlight on product pages.

As this audit and report at large suggests, retailers can identify ways to improve the online journey for health and wellness shoppers, and this extends into sustainability.

More shoppers are buying online, and their patience will run thin if they can't find the products they're seeking. Retailers must continue to improve how shoppers find products that matter to them, with the attributes they rely on, through organic search, advanced filters, personalized programs, imagery, icons, and so much more.



The Solution: NielsenIQ's Personalized Product Experience

As brands and retailers look to build trust and loyalty with today's shoppers, they are looking for an easier way to unlock deeper insights into their product set.

Retailers must have complete, representative, high quality and accurate product content that engages the shoppers, meeting their needs and fueling product discoverability and conversion. Without this, shopper loyalty will be lost, and sales will diminish.

Retailers can leverage the NielsenIQ Personalized Product Experience to receive extended attributes, product imagery, rich media, logistical information and health and wellness claims to drive discovery, engagement, and create optimal digital shopping experiences for their shoppers.



Discover

Do you enable shoppers to discover your products through advanced filters? Are you utilizing metadata and differentiation products to stand out on the digital shelf?

Retailers must opt for digital attribution as those with smarter product metadata will deliver better insights and empower the best activation, claiming an advantage over competitors in a crowded market.

With 25,000+ standard attributes and the ability to customize attributes based on complex criteria, NielsenIQ offers best-in-class product attribution supporting 99% share of search. Retailers can leverage attributes to launch the personalized experience consumers demand.



Empower

Do you empower the shopper with the expected product information, including images and details about the product?

A well-designed product page must include a complete product description specification, marketing copy, weights, dimensions, and images.

Tap into NielsenIQ's Product Library (650,000+ products) and enhance your product pages with fresh product content and images. Furthermore, rely on proactive brand enablement to ensure quality content and rest assured your supplier community is proactively managed to increase to 100%.

Additionally, retailers can leverage full product content capture solutions, including CGI for your private label brands.



Engage

Does the product display page (PDP) engage the shopper? Does the PDP resolve the questions shoppers have on their path to purchase?

Leveraging enhanced content, including videos, feature sets, and lifestyle images, helps to improve shopper engagement. The competition is fierce, and the shopper journey is complex. The brand story must be activated, providing instant, engaging and inspiring product content to shoppers.

Distinguish your products from competitors by providing shoppers with detailed and robust product pages.

Leverage NielsenIQ's enhanced content solution and easily manage rich media content to build brand awareness.

Answer shoppers' questions on the path to purchase with below the fold imagery including videos, FAQs, and feature sets.



Personalization

Do you offer a personalized and unique experience to drive brand loyalty? Do you provide your shoppers with a frictionless experience?

Differentiation is key for both in-store and online channels and retailers must provide a personalized experience for the shopper.

Differentiate in-store and online by developing a full-store wellness program, highlighting better-for-you products and making an impact in your shoppers lives. NielsenIQ has now extended health and wellness attribution to include fresh produce and in-store prepared items, helping retailers expand their health and wellness programs to capture the loyalty of a rapidly expanding consumer segment.

Products shown in the search must meet their needs and show if products are out of stock, a retailer should be able to evaluate a product similarity index and deliver the most relevant product replacements and recommendations by utilizing thousands of data points.



Leverage NielsenIQ's Personalized Product Experience

Retailers can easily leverage NielsenIQ's Personalized Product Experience solution that provides unified product content, includes high order attribute data to power discovery, and empowers personalized shopping experiences that includes product images, marketing copy, weights and dimensions, and derived health and wellness claims that's mapped to the retailers schema across all channels.

Retailers benefit from the best time to market with custom API integration that powers all content and attribution needs across all business functions covering 99% of shopper search terms with the highest levels of quality, accuracy, and coverage.

Power every facet of your omnichannel success with a single-source content solution.



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⁵Source: NielsenIQ Retail Measurement Services, NielsenIQ Product Insight, powered by Label Insight, Total Food & Beverage; Total US xAOC; L52 weeks W/E 05/21/22 vs 1YA

⁶Source: NielsenIQ Retail Measurement Services, NielsenIQ Product Insight, powered by Label Insight, Total Personal Care; Total US xAOC; L52 weeks W/E 05/21/22 vs 1YA

⁷Source: NielsenIQ Retail Measurement Services, NielsenIQ Product Insight, powered by Label Insight, Total Pet Food; Total US xAOC; L52 weeks W/E 05/21/22 vs 1YA

⁸Source: NielsenIQ Retail Measurement Services, NielsenIQ Product Insight, powered by Label Insight, Total Food & Beverage; Total US xAOC; L52 weeks W/E 05/21/22 vs 1YA, 2YA, 3YA



Who is NielsenIQ?

NielsenIQ, a global information services company, delivers the gold standard in consumer and retail measurement, through the most connected, complete, and actionable understanding of the evolving global, omnichannel consumer. NielsenIQ is the source of confidence for the industries we serve and is the pioneer defining the next century of consumer and retail measurement. Our data, connected insights, and predictive analytics optimize the performance of CPG and retail companies, bringing them closer to the communities they serve and helping to power their growth.

NielsenIQ, an Advent International portfolio company, has operations in 90+ markets, covering more than 90% of the world's population. For more information, visit NielsenIQ.com.