

MARCH 2018

TOTAL CONSUMER REPORT



CHRIS MORLEY PRESIDENT, FMCG AND RETAIL NIELSEN

WELCOME

With a new year upon us, plans are being made, goals are formed and for many of us, we set our sights on targets that exceed what we've accomplished in years past. But with flat performance across U.S. fastmoving consumer goods (FMCG), in order to win this year, we will need to understand **what** drove our industry in 2017, **why** and how to drive **what's next** through research-minded action. The industry's struggle to find growth will certainly put us to the test, especially in the face of increased channel fluidity among digitally engaged and tech savvy consumers. One thing we must always remember is that, at its core, efficiency is the key to success in all of our actions.

On the one hand, efficiency can be thought of from the micro lens of inputs and outputs. Tracking your performance to understand what is impacting your business and using measurement analytics to drive improvement. But this approach limits us to the improvement of only those variables and in our "known" universe. The competitive set you operate in today doesn't need to remain the same. When superfoods are driving growth in personal care and beauty categories, it can sometimes be tough to know where your next growth opportunity will come from. But don't ignore the possibilities beyond your immediate horizons. You can also find opportunities, both large and small, in uncharted territories.

Let's take a broad view of efficiency. Consider not just your brands, but the sector of the industry you serve...your ingredients and manufacturing process, as well as the message these elements portray about your company transparency. Think about the parts of your portfolio that are driving your business and the areas that aren't and assess their expandability. Take a deeper look and you may uncover insights where you least expect them.

Knowing your core, while constantly analyzing the periphery, is how you can remain efficient this year. Allow us to partner with you on your journey to understand more than you ever have before. Today's accelerated marketplace leaves room for competitive entrants from areas you'd least expect. We're committed to helping you understand what you've always known, what's new and even what's beyond. I hope you'll utilize our insights in forging your path toward an efficient and successful year ahead.

CONTENTS

| OVERVIEW | 4 |
|----------------------------|-----|
| TOTAL STORE | . 8 |
| RETAIL | 14 |
| HEALTH & WELLNESS | 22 |
| E-COMMERCE | 27 |
| RESTAURANTS & FOOD SERVICE | 33 |

OVERVIEW

Navigating the FMCG landscape has become difficult. It's not just the consumer path-to-purchase that's grown in complexity. The playing field for manufacturers and retailers has evolved as well. Notably, for the first time since 2009, the total number of brick-and-mortar stores in the U.S. has declined. As we'll review a little later, this hasn't affected all channels to the same extent, but it does highlight the importance of handling product assortment and distribution with utmost efficiency.

TOTAL FMCG STORE COUNT - BRICK & MORTAR



Decline in overall store count for the first time since 2009

Source: Nielsen TDLinx, Historical Database, 2009 - 2017; see endnotes for total FMCG channel definition.

As more consumers look to online opportunities, having seamless integration with digital offerings becomes vital for traditional FMCG businesses. It's pivotal to efficiently manage distribution between online and offline platforms for optimal gain, especially as we see contraction in the number of physical stores. When it comes to capitalizing in-store, retailers should constantly evaluate their portfolios with an eye for what will drive future growth, and then expand carefully with innovation and divest purposefully where it's needed.

The manufacturer landscape has been dynamic over the past year. Retailer-branded, private-label products have surmounted stigmas of value and quality. In the last year, we've seen a complete reversal in growth trajectory compared to manufacturer branded items. Compared with the closing quarter of 2016, when private label was trending negatively, store brands were seeing 3.2% dollar growth at the end of 2017. But this doesn't spell the end for manufacturers; it just signals heightened competition and the need to evaluate all potential avenues for growth in 2018.

FMCG BRICK & MORTAR MANUFACTURERS - DOLLAR GROWTH



Store brands thrived in 2017

Source: Nielsen Retail Measurement Services, Core syndicated hierarchy, Total U.S., January 2016 - December 2017, UPC-coded

On average, a typical grocery store contains about 39,000 items.¹ This variety presents a huge array of options for multi-tasking consumers, as well as a world of decisions for manufacturers and retailers when they build their assortment strategies.

The goal for FMCG players is to capture consumer attention and contribute growth to the category. This can sometimes prompt manufacturers to consider divesting; it may also prompt retailers to think about delisting underperforming SKUs. But what gets lost in this equation is assessing incrementality. In a Nielsen total store assortment study, it was determined that the cost of replacing an underperforming SKU with an unsuccessful one is huge, emphasizing the potential to drive exponential losses across channels, particularly within food retailers.

ANALYZE SLOW-PERFORMING ITEMS AND USE SCIENCE TO UNCOVER WHETHER THERE'S POTENTIAL.

In today's retail environment, we're seeing entire aisles of the store posting flat or negative performance. But this doesn't necessarily mean there's a lack of opportunity. In many cases, stagnant categories can be surprisingly expandable. For example, declines in demand don't always require that retailers remove a product or category altogether. That's because even in situations where declines exist, retailers and manufacturers need to collaborate in delivering the optimal assortment to meet shifting consumer demand.



¹Nielsen, Going Against the Grain Report, 2018

TOTAL STORE ASSORTMENT STUDY - OUTCOME

Ineffectively adding SKUs can result in category volume loss



Source: Nielsen, Going Against the Grain Report, 2018

Reacting to assortment issues needs to be done with measurement and research. On the one hand, pay attention to trends outside of your wheelhouse, but avoid pursuing growing trends in isolation. A "sleeper" category from the frozen department might seem to go against a trend towards fresh foods, but trends are just one predictor of expandability. When too many companies try to capitalize on the same trend, the market becomes overserved. This can result in the category flatlining at best, and a negative impact to the overall category, at worst.

The key here is to deliver a benefit that the category does not offer. This means that expandability doesn't always require starting-from scratch because, in many cases, existing products and their benefits have untapped expandability, too. In general, five out of six new SKUs fail,² but align yourself with the insights, research and consultants you need to be among those that succeed.

²Nielsen, Going Against the Grain Report, 2018

TOTAL STORE

FMCG BRICK & MORTAR - TOPLINE PERFORMANCE



Source: Nielsen Retail Measurement Services, Core syndicated hierarchy, and Nielsen FreshFacts, Total U.S., 52-week and 13-week periods ended Dec. 30 2017 vs. previous period, UPC-coded + Random-weight (*) See Endnotes

The fourth quarter of 2017 brought an influx in dollar sales of more than \$6.5 billion, which represented 3% in growth over the third quarter. Unit volume did not follow, however, so true growth, inflation aside, continues to escape the brick-and-mortar FMCG landscape. That said, the sizeable bump in dollar sales to close the year was enough to offset declines from the first quarter and returned the market to just over break-even state. Overall, sales reached over \$912 billion across brick-and-mortar FMCG in 2017, with flat dollar performance (+0.2%) and contractions in unit volume by 1.2%. While much of the store has held flat or declined, performance is being driven by select few departments of the store, which were key to the year's sustainability.

FMCG DEPARTMENT PERFORMANCE - BRICK & MORTAR

| | \$ Vol (Billions) | \$% Growth | Unit Vol (Billions) | Unit % Growth |
|----------------------------|-------------------|------------|---------------------|---------------|
| CENTER STORE EDIBLES | 374.0 | -0.1 | 153.2 | -1.7 |
| Grocery | 252.9 | 0.1 | 112.3 | -1.5 |
| Dairy | 68.3 | -1.5 | 26.0 | -2.9 |
| Frozen Foods | 52.8 | 0.7 | 15.0 | -1.4 |
| FRESH PERISHABLES* | 147.3 | 1.2 | 58.4 | 0.3 |
| Meat* | 54.5 | 1.0 | 16.4 | 0.1 |
| Produce* | 49.3 | 1.6 | 32.2 | 0.6 |
| Deli* | 25.1 | 1.3 | 4.9 | -0.1 |
| Bakery* | 11.6 | 0.5 | 4.0 | 0.6 |
| Seafood* | 6.9 | 1.6 | 1.0 | -3.2 |
| HOME & PERSONAL CARE (HPC) | 161.9 | 0.3 | 31.8 | -1.3 |
| Household Care | 58.1 | -0.1 | 13.5 | -1.9 |
| Health Care | 44.5 | 2.5 | 6.7 | 0.6 |
| Personal Care | 43.0 | -0.5 | 8.6 | -1.1 |
| Beauty Care | 16.3 | -1.9 | 3.0 | -3.2 |
| NON GROCERY | 138.6 | -0.1 | 25.8 | -1.4 |
| Tobacco + Alternatives | 74.1 | 2.0 | 13.2 | -0.1 |
| General Merchandise | 43.9 | -3.8 | 7.0 | -3.4 |
| Pet Care | 20.6 | 0.9 | 5.6 | -2.0 |

Source: Nielsen Retail Measurement Services, Core syndicated hierarchy, and Nielsen FreshFacts, Total U.S., 52 weeks ended Dec. 30, 2017 vs. year-ago, UPC-coded + random-weight (*) See endnotes.

Aside from the few growth pockets, sales growth has been elusive across the store. Dairy categories saw a collective dip in dollar sales of over \$1 billion, which hindered performance in center store edibles. But Americans remain focused on their health care needs. Health care categories continue to drive growth among home and personal care areas. After two consecutive quarters of inflationary growth, the fourth quarter of 2017 saw an uptick in both dollar and unit volume for the health care department. The 2017 calendar year saw an additional \$1 billion in health care sales compared with 2016, and the fourth quarter of 2017 alone brought an additional \$300 million. In contrast, household care is flat, while personal and beauty care saw declines of over \$200 million and \$300 million, respectively in 2017.

GROWTH TRENDS IN HEALTHCARE

Cough and cold prevention sees Year-over-Year growth in 2017

| WHAT'S HOT | | | WHAT'S NOT | | |
|-----------------------|-------------|---------------|--------------------------------|-------------|---------------|
| Category | \$ % Growth | Vol. % Growth | Category | \$ % Growth | Vol. % Growth |
| External Analgesics | 16.6 | 5.6 | Weight control supplements | -12.3 | -7.7 |
| Flu remedy | 11.6 | 8.8 | Sports supplements | -6.5 | -0.5 |
| Throat lozenges | 10.4 | 6.2 | Nasal strips | -5.5 | -6.9 |
| Decongestant remedy | 9.5 | 6.5 | Rubbing alcohol | -4.4 | -5.8 |
| Female contraceptives | 8.4 | 7.1 | Foot care grooming | -4.3 | -0.6 |
| Cough and cold syrups | 7.7 | 3.4 | Pregnancy test kits | -3.2 | -2.6 |
| Supplements | 5.5 | 5.1 | Male contraceptives | -3.1 | -4.4 |
| Eye medication | 5.3 | 4.5 | Sleeping aids | -2.6 | -3.7 |
| Cough drop | 5.2 | -0.2 | Eye care disinfecting solution | -2.5 | -1.4 |
| Cough and cold remedy | 5.0 | 1.3 | Cotton for first aid | -2.5 | -4.2 |

Source: Nielsen Retail Measurement Services, Core syndicated hierarchy, Annual Sales of more than \$100 million, Total U.S., 52 weeks ended Dec. 30, 2017 vs. year-ago, UPC-coded.

While it may seem like a winter phenomenon to prepare for cold and flu season, it's clear that cough and cold prevention products are driving sales year-round. Over the 2017 calendar year, cough and cold syrups, drops and lozenges and other remedies were among the top-performing health care items compared to 2016. In analyzing the fastest-growing and sharpest-declining categories, it becomes clear that in the business of health and wellness, there is a plethora of ways to treat a singular affliction, but not all are performing similarly. From the perspective of supplements, we see preventative ideals winning over those that seek to directly affect or enhance one's health. For example, supplements in a general sense are performing very well, growing by 5.5% in dollars this past year. Conversely, sales of supplements used for weight control or for sports declined by 12.3% and 6.5%, respectively. But for other categories, preventative measures are being foregone, while those oriented around immediate-relief are winning. Decongestants and external analgesics (i.e., painkillers) are both examples of products that deliver immediate-relief, and both have posted impressive growth. Conversely, preventatives to snoring like nasal strips or first aid products like cotton or rubbing alcohol have struggled.

TRENDS SPREAD ACROSS THE STORE

Sometimes growth opportunities lie adjacent to your own business. Researching beyond your areas of expertise can enable you to capitalize on trends and turn a stagnant market into one full of new and emerging opportunities. Beauty care has struggled this year, with the department contracting by nearly 2% in dollar sales year-over-year. Aligning product innovations with the right ingredients can help bolster sales where it's needed most. Consider avocado oil as an example. Oil from this superfood has done wonders across a number of related categories. While sales of margarine and spreads are declining by 5.4%, sales of hand and body lotion is flat at 0.9%, and sales of hair conditioner is down 1.3%, similar products containing avocado oil as an ingredient are seeing outsized growth. It has long-since had an impact on the food space for its healthful benefits and versatility...but it's now driving impressive growth in beauty, health care, oral care and more.



Source: Nielsen Product Insider (Panel), powered by Label Insight, 52 weeks ended Dec. 30, 2017

At a high level, there are increasingly more households purchasing products with avocado oil than there were in 2015. Penetration has increased by 5 percentage points in the last two years alone. Today, avocado oil is in 11% of all FMCG categories,³ with over 30 different categories represented. Some of the fastest-growing categories that now include this popular ingredient include hair care, hand and body lotion, oils, butters and spreads, vitamins and supplements, condiments, salty snacks and more. Collectively, products with avocado oil have seen a 31% boost in sales since 2016. Growth may have started in food, but it's now spread throughout the store.

IT'S AVO-CONTROL

Fastest-growing categories with avocado oil as an ingredient

CATEGORIES WITH AVOCADO INGREDIENTS: DOLLAR GROWTH VS YEAR-AGO



Source: Nielsen Product Insider, powered by Label Insight, 52 weeks ended Dec. 30, 2017 vs. year-ago

³Excludes general merchandise, alcohol and tobacco departments. Source: Nielsen Product Insider, powered by Label Insight, 52 weeks ended Dec. 30, 2017

Superfoods, ingredient trends and the like have implications beyond product transparency and increasing popularity. Extending past the FMCG industry, we can draw comparisons to evolutions in the tech world, where smartphones have all but replaced point-and-shoot cameras, and in the media space, where streaming services are re-shaping how we watch video and listen to music. In the same way that devices develop features to meet increasingly more needs, entire categories are fusing into new features of other product sets. Consumers are no longer shopping just for categories themselves; they're shopping for products that can fulfill their need **and** also serve a purpose.

THE FUTURE OF FEATURES

Functional ingredients as marketable product features

\$% GROWTH (SUNSCREEN AS AN INGREDIENT)



Source: Nielsen Product Insider, powered by Label Insight, 52 weeks ended Dec. 30, 2017 vs. year-ago

Sunscreen is a perfect example of a product whose benefit can be incorporated into another item for enhanced purpose. On its own, sunscreen is a vital category to many families, and it's essential to meeting various health care needs. That said, sales of sunscreen as a category declined by 2% in 2017 compared with 2016. Functionally, sunscreen can serve a truly useful purpose, and as an ingredient, it becomes a valueadded feature to other products. When added to hand and body lotion, for example, the product fulfills both the consumer need for a moisturizer and also provides protection from ultraviolet (UV) light. And increasingly, we're seeing a desire for "all-in-one" products that can do both.

Products with sunscreen as an ingredient are certainly demonstrating the potential of ingredient innovation through product features. However, it hasn't become a universally adopted feature just yet. Cosmetics with sunscreen as an ingredient feature have yet to pick up speed. While there's appetite for UV protection, there's still room to grow for this trend to proliferate the store.

RETAIL

Across the FMCG landscape, change is most evident in retail. What was once a collection of clearly defined channels has flourished into an interconnected network of outlets. The retail landscape has expanded. Traditional definitions of the channels we shop are now accompanied by synonymous, but not identical, alternatives. Today, a single grocery store can cover an array of bases: it can feature gourmet experiences, offer great value for the dollar and provide delivery service directly to your door. Modern retail spans both physical and virtual, and FMCG retailers and manufacturers need to efficiently cater to this new norm—**one that reflects shifting consumer trends.**

In the span of the 2017 year, the number of FMCG retail stores across America dropped by more than 1,000. While this represents a contraction of just 0.3%, it's the first decline in store count we've seen in nearly a decade for FMCG retail. Looking beyond FMCG, we can see the long-term impacts of channel fragmentation come to life. Where online presence has been making waves for much longer, we see how the last decade has affected store closings across non-FMCG channels like books, apparel, consumer electronics and more. From 2007 to 2017, store counts within the FMCG industry increased, while non-FMCG channels have contracted. The ripple effect has yet to be fully realized. This underlines the importance of investing in retail infrastructure and the need to strategically align your distribution efficiently. While the picture remains positive for FMCG retailers, the time to act is now.



A DECADE OF CHANGE IN OPEN STORE COUNTS - 2007 TO 2017

Store contractions hit Non-FMCG the hardest... for now



Source: Nielsen TDLinx, Historical Database, 2007 - 2017

Consumers are making 1.2% fewer trips for FMCG than they were a year ago. But not all channels have seen declines in traffic. Perhaps not surprisingly, online channels continue to drive purchase occasions, as the average shopper increased their online trips by 8% last year. Other channels seeing trip growth include mass merchandise and superstores, dollar stores, and value grocery. Variety is a commonality here. The vast assortment of offerings available in these channels is unmatched. But of these highly shopped channels, only dollar and value grocery were able to grow their average basket size as well. In this case, value in addition to variety may be a winning recipe for right now.

TRIP ANALYTICS BY CHANNEL

Variety wins: Online, Mass Merch and Dollar stores see growth in trip traffic

| | Trips/Shopper | Trips/Shopper % Change | \$ Spend/Trip | \$ Spend/Trip % Change |
|------------------------|---------------|---------------------------|---------------|---------------------------|
| TOTAL CHANNELS | 165 | -1.2 | 31 | 0.0 |
| Online | 6 | 8.0 | 41 | -2.7 |
| Drug stores | 20 | -1.0 | 20 | 1.1 |
| Dollar stores | 30 | 0.7 | 13 | 0.2 |
| Warehouse club | 14 | -1.4 | 66 | -1.6 |
| Pet stores | 7 | -3.2 | 35 | -3.8 |
| Mass merch & supers | 37 | 1.2 | 40 | -0.8 |
| Value grocery | 18 | 0.5 | 27 | 2.5 |
| Conventional grocery | 59 | -2.4 | 33 | 0.4 |
| Premiere fresh grocery | 14 | -1.6 | 22 | 2.5 |

Source: Nielsen Homescan, Trip Projected Data, Total U.S., 52 weeks ended Dec. 30, 2017 vs. year-ago, UPC-coded

With dollars spent on each trip remaining flat, the need to meet consumer needs for each FMCG purchase has never been higher. Navigating your next steps involves following where dollars are shifting. Furthermore, knowing the context into why the shifts are happening will help you retain your buyers and guide wandering eyes in your direction.

Let's look at the convenience and gas channel as an example. At a total channel level, traffic declined by 2% in 2017⁴ and store count dropped by more than 350 across the nation. At a more granular level, we see that most store closures affected gas stations and kiosks. In fact, conventional convenience stores have seen nearly 450 new stores opened throughout 2017.⁵ But store openings and trip traffic only tell half of the story. Purchase patterns and behavioral analysis can guide us further.

⁴Nielsen Homescan, Trip Projected Data, Total U.S., 52 weeks ended Dec. 30, 2017 vs. year-ago, UPC-coded ⁵Nielsen TDLinx, 2017

CONVENIENCE CHANNEL - OPEN STORE COUNTS

Conventional convenience stores see growth in 2017

| 2016 VS. 2017 | | | | | |
|---------------------------------|-------------------------|----------------------------|--|--|--|
| Channel | % Growth in Store Count | Change in Open Store Count | | | |
| Total Convenience Trade Channel | -0.2 | -355 | | | |
| Gas Station/Kiosk | -3.8 | -778 | | | |
| Military Convenience Store | -3.2 | -23 | | | |
| Conventional Convenience Store | +0.3 | +446 | | | |

Source: Nielsen TDLinx, 2016 - 2017

While traffic to the overall convenience and gas channel may be declining, we know that the retail footprint for conventional convenience stores has grown. In addition to this, consumer behavior highlights areas of opportunity within this grab-and-go channel. Shoppers are spending 2% more per trip on FMCG categories within the convenience and gas channel than they were a year ago. But which categories are driving growth?

Across the Nielsen-measured convenience channel, sales have increased by 1% to over \$140 billion. But very few categories have driven this trend. Salty snacks and tobacco alternatives have led the way, seeing dollar growth of 2.3% and 8.2%, respectively.⁶ How other departments can thrive in this sector of retail remains to be determined, but understanding why consumers are shying away from them is a great starting point.

⁶Nielsen Convenience Scantrack, NACS Product Hierarchy excluding food service, Total U.S., 52 weeks ended July 1, 2017 vs. year-ago

DEPARTMENT PERFORMANCE WITHIN CONVENIENCE STORES - \$ GROWTH

While overall sales remain positive, food growth remains exclusive to indulgent categories

| | \$ Growth |
|---------------------------|-----------|
| Total Convenience Channel | +1.0% |
| Tobacco Alternatives | +8.2 |
| Salty Snacks | +2.3 |
| Beer | +1.4 |
| Cigarettes | +0.6 |
| Packaged Beverages | +0.5 |
| Candy | 0.0 |

Source: Nielsen Convenience Scantrack, NACS Product Hierarchy excluding food service, Total U.S., 52 weeks ended July 1, 2017 vs. year-ago, UPC-coded

Convenience doesn't have to be just a store format. Convenience stores represent a means to a need state and should be thought of as a mindset more than a channel. As small-format locations presented within arms reach of busy, multitasking consumers, the opportunities to capitalize on fresh, ready-prepared and even packaged foods are plentiful. While only about one-third of convenience store shoppers expect to purchase fresh foods in this channel,⁷ the reasons why they choose otherwise aren't insurmountable.

You see, the top barriers to purchase consideration for convenience stores, aren't due to the in-store environment itself. In fact, the majority of consumers indicate that it is quality, assortment and value that are most likely to dissuade them. One in every three Americans would agree that products in convenience stores fail to deliver good value for money spent. Conversely, just 4% perceive environmental factors like store format, customer service and wait time as barriers to this channel.⁸ With the proper nurturing, perceptions about quality can be changed, assortment can be optimized and promotions can be better utilized to give the sense of value.

⁷Nielsen, Convenience Store Choice Drivers, 2017 ⁸Nielsen, Convenience Store Choice Drivers, 2017

BARRIERS TO CONVENIENCE STORE CONSIDERATION

It's perceived value and quality, and not in-store environment

% RESPONDENTS - TOP BARRIERS

35% **PRODUCTS AREN'T GOOD VALUE FOR THE MONEY**

23% MINIMAL PRODUCT SELECTION

21% **PRODUCTS ARE NOT**

HIGH QUALITY

17% **PRODUCTS DON'T**

TASTE GOOD

15% **PRODUCTS ARE STALE / NOT FRESH**

Source: Nielsen, Convenience Store Choice Drivers, 2017

Where some doors have closed, it's clear that not all of the convenience channel has struggled. Through purposeful messaging, the role of this channel can be optimized to better serve the needs of convenienceoriented consumers. Similar to how store branded products have surmounted the challenges of quality and value propositions, there is opportunity for convenience stores to do the same.

PRIVATE LABEL PERFORMANCE

Store brands accelerate growth trajectory



BRANDED PRODUCTS

2013 574.2 5714 2014 567.3 2015 2016 553.1 2017

CAGR - Compounded Annual Growth Rate

Source: Nielsen Retail Measurement Services, Core syndicated hierarchy, Total U.S. excluding convenience store, 52 weeks ended Dec. 30, 2017 vs. year-ago, UPC-coded

Beyond any individual channel, store branded products have continued to redefine their importance to retail and have done well to drive growth throughout 2017. Thriving at +3% in dollars year-over-year, private label has seen sales growth of more than three times the rate of branded products.⁹ But not all private-label products are driving growth at the same rate, and not all branded products experiencing declining sales.

When dissected by price tier, it's clear that premium products are winning across the board. Analyzing individual UPC price points, we created a five-tier distribution that isolates the most premium- and discountoriented groups of products. Through this, it becomes clear where opportunities lie for both manufacturers and retailers. For store brands, discount offerings represent over 60% of revenue; however, the most value-oriented products have struggled to keep pace compared to doubledigit dollar growth of premium products. Across branded product sales, premiumization is sustaining more than one-third of dollar volume and is driving the most growth.

DOLLAR SHARE BY PRICE TIER



Premium offerings see growth across the board

Source: Nielsen Analytic Product Attribute (APA) database by Nielsen Advanced Solutions Group, 52 weeks ended July 22, 2017 vs. year-ago ⁹Nielsen Retail Measurement Services, Core syndicated hierarchy, Total U.S. excluding convenience stores, 52 weeks ended Dec. 30, 2017 vs. year-ago, UPC-coded But let's take private label out of the equation and analyze a manufacturerbrand-centric category like candy. Looking at the distribution of price points across branded candy UPCs, we see that the discount oriented tiers command 45% dollar share. Representing nearly half of dollar sales, it's interesting to note that they drove most of the declines for candy. Comparatively, mid-tier premium brands drove the greatest returns for the category last year. Where manufacturers can cater to consumer demand for gourmet candy and chocolate at more affordable price points, they can hit the sweet spot where the highest- and lowest-cost brands are missing the mark.

CANDY BRANDS BY PRICE TIER



Discount-oriented candy brands see declines

Source: Nielsen Retail Measurement Services, Total U.S. excluding convenience stores, 52 weeks ended Dec. 30, 2017, and Analytic Product Attribute (APA) database by Nielsen Advanced Solutions Group, 52 weeks ended July 22, 2017 vs. year-ago, UPC-coded.

HEALTH & WELLNESS

WHAT'S DRIVING WELLNESS CONSIDERATIONS

As we've noted over the past year, the health business is not only thriving, it's extending beyond categorical borders and driving trends throughout the store. From fresh foods to functional beverages, the food space is full of perspectives on well-being. On the non-food side, the influence of healthful practices in beauty regimes, household cleaning and beyond show proof that we're all in the business of health and wellness to a certain degree. But with such expansive growth, comes areas of saturation or demand shifting. Alignment with the right ingredients and health claims can enable agility and mindfulness of where untapped demand exists. Deciphering fad from fundamental is one way in which you can hedge your bets in this space and ensure your brands remain relevant and expertly aligned with what is and is not resonating with consumers.

This quarter, you'll want to pay attention to the following:

- What's hot off shelves when consumers are down with the cold
- Which plant-based foods are winning as protein-powerhouses
- What's *not* in products, over what is

TOP WELLNESS CLAIMS - Q4 2017

Year-end sees seasonal influence of ailment remedies and diet-conscious claims

FASTEST GROWING HEALTH & WELLNESS CLAIMS BY DOLLAR GROWTH

| LATEST 52 WEE | 52 WEEKS VS. YEAR-AGO | | Q4 2017 VS. Q3 2017 |
|---------------|-----------------------|-------------|-------------------------------|
| H&W Claim | Dollars | \$ % Growth | H&W Claim Dollars \$% Growt |
| Grain Free | 795M | 51.2 | Cough 1.23B 118.7 |
| Calorie Claim | 1.12B | 33.9 | Headache & Migraine 490M 70.9 |
| Cruelty Free | 925M | 30.0 | Hypertension 116M 27.0 |
| Grass Fed | 677M | 27.6 | Reduced Caffiene 210M 24.0 |
| Corn Free | 1.44B | 22.1 | Free Range 125M 20.9 |

Source: Nielsen Retail Measurement Services, Core syndicated hierarchy, Total U.S., periods ended Dec. 30, 2017, UPC-coded

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary.

At a high level, understanding which package claims are performing best enables a wealth of context into the current state of mind for consumers in the health and wellness space. For example, nearly one out of two surveyed Americans (46%) would agree that claims on food products influence their purchases.¹⁰ First and foremost, we're seeing continued focus on the fair and ethical treatment of animals across a number of spectrums. Growth in cruelty-free claims attest to the avoidance of animal testing in beauty care, an area where transparency is certainly making headways and rewarding brands that show their cards so to speak. Additionally, the treatment of livestock, and tangentially, the healthful quality of products like meat and dairy, remains another important theme, as products with grass fed claims see sales growth just over 27% year over year. Lastly, the quality of food served to our feline and canine companions continues to remain top of mind. Grain free product claims, almost wholly concentrated in pet food, continue to claim the top spot in terms of product claim growth rates.

One ideal that's newly reclaimed it's high ranking among product claims this year is calorie claims. Sales of products with calorie-counting package claims reached over \$1.1 billion in sales last year, seeing an impressive 34% in dollar growth compared with 2016. Interestingly, it's both the indulgent and healthful snacks that benefitted. While 43% of sales from calorie-counting claims came from ice cream and salty snacks combined, the wholesome snack category accounted for 32% of sales for this product claim.¹¹ Clearly, when it comes to monitoring caloric intake, consumers are being enticed by guilt-free snacking claims that aren't limited to just the "better-for-you" sector of snacking.

INGREDIENT TRENDS IN VITAMINS & SUPPLEMENTS

It's not just over-the-counter drugs seeing gains



DOLLAR GROWTH VS. YEAR-AGO

Source: Nielsen Product Insider, powered by Label Insight, 52 weeks ended Dec. 30, 2017 ¹⁰Nielsen. Global Sustainability survey. 2017

¹¹Nielsen Retail Measurement Services, Core syndicated hierarchy, Total U.S., periods ended Dec. 30, 2017, UPC-coded

Traditional over-the-counter remedies aren't the only ones seeing growth. With increased accessibility to product information, consumers are armed with even greater abilities to manage their health regimes with utmost level of detail and care. As a result, knowledge of natural ingredients with medicinal properties has never been higher and demand for holistic health practices has followed. The vitamins and supplements category is a perfect example. While the category as a whole has performed incredibly well at +5% sales growth, growth has been multiples higher in many cases. Vitamins and supplements that contain ginger, turmeric or ginkgo as ingredients, for example, have seen double-digit dollar growth of 13%, 17% and 24%, respectively, compared to sales in 2016.

PLANT POWER: HIGH PROTEIN IN ALTERNATIVES

PLANT-BASED FOODS THAT MEET FDA STANDARDS FOR "HIGH PROTEIN" CONTENT



Absolute \$ Growth and % Growth

Source: Nielsen Product Insider, powered by Label Insight, 52 weeks ended Dec. 30, 2017

With ample attention placed on animal welfare in product testing and overall treatment of livestock, the popularity of plant-based alternatives to protein isn't surprising. While 78% of surveyed Americans indicate that meat is their primary source of protein, one in five consider legumes, nuts and seeds as their fundamental protein of choice.¹² But a concern for vegetarians, vegans and even meat-loving consumers is whether or not their intake of alternative proteins is enough to meet their daily recommended amounts. Well, many have done well to not only assure naysayers, but to invest in this space with innovative products that have reaped growth well beyond category benchmarks. Products that leverage plant-based foods and meet FDA standards for "high protein" content have performed incredibly well this year and have done so across a breadth of different categories. Items that have boasted these important protein-rich claims are seeing exponential growth in areas like grocery sweet goods at +484%, or as in the case of yogurt, outperforming an overall declining category, driving +3% in dollars.13

FREE FROM INGREDIENT CLAIMS - \$ SHARE AND SHARE SHIFT

For many consumers, what's "not in" products matters more than what is



\$ SHARE AND SHARE PT. SHIFT 2015-2017

Source: Nielsen Product Insider, powered by Label Insight, 52 weeks ended Dec. 30, 2017 vs. two years ago ¹²Nielsen, Protein Survey, U.S. Homescan Panel, April 2017 ¹³Nielsen Product Insider, powered by Label Insight, 52 weeks ended Dec. 30, 2017

Knowing what's in a product can be a valuable tool in navigating hundreds of options available to consumers across all channels. But in many cases, it can be overwhelming and often unappealing to see what's in certain products. One in 10 personal and beauty care shoppers desire products without artificial ingredients; among skin care shoppers, that number increases to 15%.¹⁴ As such, manufacturers can often find reward in taking a stance against such ingredients and marketing products based on what's not in them. Looking across beauty care categories like facial skin care, cosmetics and facial cleansers, we see key examples where emphasizing "free from" claims have taken off from a sales perspective. Today, nearly two-thirds of cosmetics sales are attributed to products claiming to be paraben free. In the last two years, dollar share in this space has increased nearly 7 percentage points. Where innovation into new or trendy ingredients may be out of reach, consider taking transparency as a strategic priority and aligning your product with the things consumers don't want your brand associated with.

¹⁴Nielsen, Category Shopping Fundamentals, 2017



E-COMMERCE

E-commerce is on the minds of many, but we may be further along the path to attaining critical mass than we may have thought. The online marketplace would be considered at a mature state when 70% of consumers are engaged. Historically, reaching 20% of market penetration has been a tipping point for industries to accelerate to maturation...and the clock is now ticking. While our research once predicted we'd reach online critical mass by 2025, the past year has seen enough acceleration to surpass our initial estimates. As of 2017, 27% of consumers purchased food, beverages or both, online. Heading into 2018, we are past the "tipping point" and in as few as five-seven years, research from Nielsen and Food Marketing Institute (FMI) projects that 70% of consumers will be purchasing food and beverage goods online.¹³

Amidst predictions of digital food retailing saturation, it begs the question: Are retailers and manufacturers ready for e-commerce?

PROJECTED E-COMMERCE PENETRATION IS ACCELERATING



Digital food retailing is expected to mature sooner than previously expected

Source: Nielsen Digital Segmentation Survey, 2016; "CPG Ecommerce in the U.S.," eMarketer, Oct. 2016 ¹³Nielsen and Food Marketing Institute (FMI) Omnichannel Collaboration Model Report, 2018 According to more than 100 online assessments to determine digital readiness, roughly 30% of manufacturers think they are ready for a digital business transformation and only 10% of retailers can match manufacturer's readiness statement. But when scored against key measures of digital readiness, it seems that neither are as digitally ready to meet the digital go-to-market requirements of pure-play online retailers.

The requirements of all things online fall neatly within three classic transformation categories: people, processes and technology. While manufacturers self-report to be further along their path to digital transformation, it's proven that both retailers and manufacturers have progress still to make. A survey by the FMI, determined a number of key findings to assert this. From the perspective of people, the research found that only 18% of manufacturers and 7% of retailers believe their organizations have the human capital to succeed in digital. Furthermore, among the processes themselves, just 30% of manufacturers and 22% of retailers have integrated their digital marketing and merchandising assets. Finally, just 35% of manufacturers and 23% of retailers have established a digital-investment planning and budgeting roadmap for their technological transformation. The world is demanding digital, and it's time for key stakeholders to deliver.

DETERMINING DIGITAL READINESS

Three transformation categories crucial to omnichannel success

PEOPLE, PROCESSES, TECHNOLOGY: THREE INGREDIENTS CRUCIAL TO OMNICHANNEL SUCCESS



People represent the digital competency and skill sets needed to develop, execute and measure an effective omnichannel strategy.



Processes represent the capabilities retailers and manufacturers must develop to integrate their online and offline businesses into a true omnichannel environment.



Technology represents the real time big data and analytics that enable people and processes to work effectively.

Source: Nielsen and FMI, Omnichannel Collaboration Model Report, 2018

Looking across departments, the appetite for e-commerce has certainly been demonstrated. Online share of sales across food departments still leaves much to be desired, but growth is strong and the forecasted acceleration of the digitally engaged food landscape is on the horizon. Center of store edibles like packaged grocery, frozen foods, and dairy are examples that have only just begun to penetrate the online space, but are poised to hasten pace, posting annual dollar growth of 41%, 49% and 67%, respectively. Beauty care leads other departments in terms of e-commerce share of sales. With nearly one in three dollars (31%) spent on beauty care categories occurring via e-commerce channels.

E-COMMERCE - DEPARTMENT INSIGHTS

Beauty sales rapidly shifting to digital channels

| Beauty Care | 0 | | 31% | 6 |
|-------------------|---------------|-----|-----|-------|
| Pet Care | × | | 28% | 73.3% |
| Health Care (| | 14% | | 27.3% |
| Personal Care | 0 | 11% | | 28.7% |
| Household Care | ſ | 9% | | 17.8% |
| Packaged Grocery | Ħ | 3% | | 41.4% |
| Produce | 10 | 2% | | 18.4% |
| Meat ₍ | BB | 2% | | 46.0% |
| Dairy | a | 1% | | 67.4% |
| Bakery | Õ | 1% | | 57.0% |
| Alcohol | | 1% | | 0.8% |
| Frozen Foods | 1 88 1 | 1% | | 49.3% |

Source: Nielsen Total Store Report, E-commerce measurement, 52 weeks ended Oct. 28, 2017 vs. year-ago

\$ GROWTH

Beauty care in and of itself comprises a highly personal and purposeful set of purchases. Tailored to one's unique physical attributes and intrinsically grounded in one's personality, consumers expect to be able to identify with the beauty brands they purchase. In fact, nearly one in 4 (23%) of cosmetic shoppers bought brands with which they could identify with.¹⁰ E-commerce opens a world of opportunities in this regard due to the endless opportunities to research, access and conveniently purchase niche and mainstream beauty brands online. Without the limitations in shelf facings and the ease and accessibility of make-up tutorials and product reviews, e-commerce enables efficiencies for all: retailers, manufacturers and consumers.

In fact, across many beauty care categories, their ability to reach and engage consumers online has enabled consistent performance indicative that there's both new and repeat buyers in effect. It's a combination of both replenishment and new discovery that's made e-commerce such a promising addition to categories like hand and body lotion, facial cleansers, cosmetics and even others beyond beauty care. The ease to which "known needs" in your cosmetic kits can be automated drives convenience-seeking consumers. Conversely, the sheer quantity of available brands left to discover, draws consumers seeking unique offerings that further exemplify their personalities.

CATEGORY PERFORMANCE - E-COMMERCE \$ GROWTH



Replenishment and new discoveries drive online beauty care

Source: Nielsen E-commerce measurement, Total U.S., 52 weeks ended Nov. 4, 2017, Growth defined by Compounded annual growth rate, Jan. 2016 – Nov. 2017 ¹⁰Nielsen, Category Shopping Fundamentals, 2017

Channels are fragmenting, and the digital food space is no exception to this phenomenon. There are many ways in which online capabilities enable the path to purchase for consumers. Meal kits represent one such method that's recently leading other channels. Meal kit providers are claiming share of monthly spend at three times the rate of other channels. Digital meal ordering and delivery and pure play e-grocery are other channels seeing top growth in monthly spend.

TOTAL MONTHLY SPEND BY CHANNEL (INDEXED TO MARCH 2015)



Meal kit and digital meal ordering are driving growth

Source: Nielsen Buyer Insights, March 2015 - March 2017, Total U.S.

But who is leading the charge when it comes to these online methods for food consumption? Compared with the overall American population, Generation X leads in meal kit and e-grocery purchasing, accounting for one in every two dollars spent in either channel. Perhaps due to the likelihood of children in the home, these consumers are flocking to the convenience of easy meal-prep and groceries delivered to their homes. Millennials on the other hand, represent the largest share of digital meal ordering and delivery. Accounting for 46% of all spending in this area of digital food purchases, Millennials are taking advantage of out of home dining options without having to leave their home, school or place of work.

DOLLAR SHARE BY GENERATIONAL COHORT

Generation X heavily spend on meal kits and e-grocery channels



Source: Nielsen Buyer Insights, April 2016 - March 2017, Total U.S.; percentages may not total 100% due to rounding

RESTAURANTS & FOOD SERVICE

Physical stores have long been essential to food and beverage consumption across the nation. For decades, the rate at which we would spend money on food in store would correlate fairly consistently to what we would consume at home. Today, marketing messages are everywhere. The ways we connect with brands and products are more endless, and with more channels than ever to fulfill our purchase needs, consumption habits have evolved. With fundamental changes in how we receive and interact with products and their accompanying messaging, consumption beyond our dining room tables is on the rise. In fact, according to preliminary results from the U.S. Department of Agriculture, 2017 is on track to becoming the second consecutive year in which more food dollars were spent away from home than for in-home consumption.¹¹

TOTAL FOOD EXPENDITURE - \$ SHARE



Upward trajectory continues for food dollars spent away from the home

Source: U.S. Department of Agriculture – Economic Research Service (ERS), Food Expenditure Data *Preliminary 2017 results, dated to Nov. 2017

¹¹U.S. Department of Agriculture – Economic Research Service (ERS), Food Expenditure Data

As we can see from the data above, food expenditures are on the rise. However, it's the share shift from consumption within the home that retailers and manufacturers should take note of. Eating out has become increasingly more popular. While much of this phenomenon can be attributed to the quickness and convenience of fast-food oriented restaurants, there are other attributes that drive out of home consumption. For many, low everyday prices or good deals, complemented by quickness, drive food purchases within convenience/ small format stores, fast food joints and quick-serve restaurants (QSR). For casual dining establishments, top purchase drivers include taste and variety of offerings on the menu.¹² Knowing the factors that drive consumers to choose dining in these establishments is important for growth. But, efficiencies can be realized in understanding where consumption is taking place the most across a variety of establishments.

CONSUMPTION LOCATION OF PURCHASED FOOD/BEVERAGES BY RETAILER

At home consumption still strong among brick & mortar, convenience and drug for on-the-go meals

| WHERE DID YOU CONSUME THE FOOD/BEVERAGE PURCHASED FROM EACH ESTABLISHMENT? % RESPONDENTS | | | | | | |
|--|------|------------------|-------------|-----------|--|--|
| | Home | Store/Restaurant | Work/School | On-The-Go | | |
| Grocery | 91% | 9% | 17% | 13% | | |
| Mass | 90% | 8% | 20% | 16% | | |
| Club | 85% | 17% | 19% | 11% | | |
| Drug | 76% | 9% | 22% | 29% | | |
| Liquor Stores | 87% | 7% | 5% | 11% | | |
| Convenience & small format | 61% | 12% | 26% | 52% | | |
| Fast Food & QSR | 51% | 59% | 16% | 31% | | |
| Casual Dine | 15% | 91% | 5% | 3% | | |
| Fine Dine | 13% | 87% | 6% | 2% | | |
| Online-only retailer | 90% | - | 20% | 14% | | |
| Digital Order & Delivery | 70% | - | 28% | 15% | | |
| Meal Kit Provider | 71% | 13% | 25% | 15% | | |
| Food Trucks | 27% | 46% | 24% | 35% | | |

Source: Nielsen survey of 2,081 U.S. adults aged 18+ surveyed online between June 16 and 20, 2017 by The Harris Poll® ¹²Nielsen survey of 2,081 U.S. adults aged 18+ surveyed online between June 16 and 20, 2017, by The Harris Poll®

Some interesting distinctions emerge when we compare the places people make their purchase and the places Americans actually consume food and beverages. First and foremost, eating and drinking at home still commands the lion's share of consumption from brick-and-mortar channels like grocery, mass merchandise, warehouse club, drug stores, liquor stores and convenience/small format stores. For online food and beverage purchases, most consumption takes place at home, but work and school are becoming "home" to many consumers of meal kits and digital food ordering (25% and 28%, respectively). In terms of engaging with consumers "on-the-go," there is opportunity for drug stores, convenience and small-format stores and fast food and QSR establishments, as many are already frequenting these channels for their quick dining needs.

As lines blur, channel parameters become less relevant in the grand scheme of things. Instead, focus on understanding consumer demand and priorities as they relate to eating occasions. Preference for where to buy and where to eat can vary tremendously—across individuals, within households, and even on a meal-by-meal basis. In that regard, food and beverage companies need a detailed, data-driven understanding of the types of food people are buying, when they're buying it, and where. We know, for example, that in-home consumption is still paramount for many retailers. But understanding how consumer priorities differ when it comes to food and beverage occasions will lead to how you can most efficiently serve them.

NIELSEN CONSUMER SEGMENTS ON FOOD AND BEVERAGE LANDSCAPE



Source: Nielsen analysis and survey of 2,081 U.S. adults aged 18+ surveyed online between June 16 and 20, 2017 by The Harris Poll®

We've developed four distinct, data-driven consumer segments to better describe the new ways Americans purchase and consume across the food and beverage landscape. Each segment differs in terms of spending and preferences for channel, occasion and location. In fact, while representing the smallest proportion of our population, Digital Adopters account for nearly twice their share of overall food spend.

FINDING THE SWEET SPOT



Intersection of occasion, location & consumers' priorities

Source: Nielsen, Merging Tables and Aisles Report, 2018

The segments can be applied to a number of business scenarios that enable your path towards providing offerings that meet a true "sweet spot" of consumer demand. That is, curating and reaping the benefits of a product that: (1) meets location needs of being consumed easily in shoppers' location of choice, (2) is available for the meal occasion of choice and (3) fulfills shoppers' desired experiential needs (i.e. health, taste, price, quality of staff/service interaction, etc.). Taking a product focus to these segments allows you to understand the type of consumer your product skews toward. And from a retail perspective, it can guide your focus around the behaviors that drive each segment—as well as whether your product and service offerings in store are aligned.

END NOTES

Except where otherwise denoted:

- Total FMCG Open Store Count universe based on the sum of Nielsen TDLinx "total" trade channels for grocery, mass merchandisers, warehouse club, drug, convenience (including gas kiosks), liquor and cigarette outlets.
- Total U.S. retail measurement includes: grocery, drug, mass merchandisers, convenience, select dollar stores, select warehouse clubs, and military commissaries (DeCA)
- Where denoted by asterisk (*), data reflects UPC + random-weight retailer-assigned PLU (price look-up code) and system 2 sales volume.

ABOUT NIELSEN

 \bigcirc

Nielsen Holdings plc (NYSE: NLSN) is a global measurement and data analytics company that provides the most complete and trusted view available of consumers and markets worldwide. Our approach marries proprietary Nielsen data with other data sources to help clients around the world understand what's happening now, what's happening next, and how to best act on this knowledge. For more than 90 years Nielsen has provided data and analytics based on scientific rigor and innovation, continually developing new ways to answer the most important questions facing the media, advertising, retail and fast-moving consumer goods industries. An S&P 500 company, Nielsen has operations in over 100 countries, covering more than 90% of the world's population. For more information, visit www.nielsen.com.



THE SCIENCE BEHIND WHAT'S NEXT[™]