



THE DIGITAL STRENGTH INDEX

CONSUMER STAPLES: LINKING DIGITAL TO SHAREHOLDER VALUE

November 2018

isobar +  alpha-DNA

A CASE FOR DIGITAL TRANSFORMATION

At Isobar, we've spent 20 years advising companies on their digital strategies and helping them build leading digital experiences. Our clients include HBO, Enterprise, and the U.S. Air Force. Public companies have struggled with these investments, questioning the size and speed of payback. Disruption is happening everywhere, but it's easy to imagine one's business has unique, high barriers to entry that others don't. And, some of the most disruptive things companies can do—new digital business models, even new brands—can have long paybacks and cannibalize existing businesses.

Isobar has always believed in a link between digital strength and shareholder value, for good and for ill. Companies that give only glancing attention to digital risk long-term value destruction. When we met alpha-DNA—a data provider to hedge funds that uses digital data to predict revenue growth—we knew we could prove our intuition was right and give clients an empirical way to measure their investments in digital transformation.

alpha-DNA and Isobar have partnered to create the Digital Strength Index. The Index is an aggregate measure of the top 1,000 public companies. Based on over five years of data gathering, analysis, and benchmarking, the primary focus is to assess the digital performance of companies and translate that into forward-looking, topline growth expectations. We have proven the link between digital strength and shareholder value in a way that passes the rigorous standards of hedge funds.

The data shows that digital leaders outperform digital laggards in all industries versus simply those with visible disruption occurring (e.g., retail, media). It is also important to note that being a digital laggard may represent a fundamental business model challenge (e.g., retail store video rental like Blockbuster), but those business model challenges can be addressed (e.g., Netflix successfully pivoted from mailing DVDs to content streaming) with a proper digital transformation strategy.

It is also important to note that being an experience led company does not inoculate you from disruption, as LinkedIn's eclipsing of online recruiting pioneer Monster illustrates. Even Digital Strength, as defined by our own Index, does not inoculate companies from digital disruption. It is possible to gain digital vitality through outsized offline and online media spending which drives traffic to web, mobile, and social channels. While effective in the short term, companies should fundamentally embrace digital transformation as a more sustainable form of competitive advantage.

CEOs and boards should strongly consider Digital Strength as they contemplate the investments required to transform their businesses in the digital economy. While success may follow a different investment profile and metrics than they are used to, Digital Strength will translate into revenue increases and improvement in shareholder value.

CONSUMER STAPLES INTRODUCTION

Despite the recent decline in overall disposable income and economic disruption Consumer Staples remains one of the largest industries, consistently growing over the past five years. While that statement may seem unsurprising knowing that expenditures on food alone equate to 13% of household budgets¹ what is surprising is where the growth is coming from. Up until recently the majority of category trends were shaped by the large, traditional brands we all know and grew up with. But, the industry is shifting and smaller players are the ones who are disrupting the market, primarily through digital prowess, their use of data-driven consumer insights and their ability to pivot quickly to connect with their customers -- often in fun and unique ways. In fact, Consumer Staples showed growth last year even with 90 of the top 100 brands losing market share².

In 2014, Baby Boomers and Senior citizens accounted for more than half of the United States' Consumer Staples expenditure, but that percentage is quickly shifting as Millennials start gaining significant purchasing power. By 2020 it's expected that Millennials will account for 30% of all retail expenditures³ and, as digital natives, their purchasing motivations and expectations align much less with traditional packaged goods marketing strategies. And, while ecommerce is an important part of this evolution (with 10% of industry sales projected to be completed online by 2020) the bigger trend is that shopping channels are changing more rapidly than ever before. Just over half of Millennials shop at least once a week in brick and mortar stores, with that number diving down to 44% of the Gen Xers who follow them⁴.

So, what's the secret "digital sauce"? Is brand loyalty as we know it dead? Are legacy brands fading away while challengers are taking the lead?

Not necessarily. While it's true that smaller companies are stealing market share from larger Consumer Staples organizations, the brands who are winning are the players who are listening to their customers. The brands that are taking the time to have a two-way conversation, acknowledging what consumers want and adapting their messaging and approach to meet those needs. And, the most effective way to do that is through building digital strength. It's about changing your approach to not only acknowledge what's happening, but to then serve up experiences that connect with customers beyond the mere functional: seamlessly incorporating a brand into their lifestyle because it naturally belongs there. Digitally native Consumer Staples brands have a slight advantage given their inherent agility and direct-to-consumer distribution models, but larger, legacy brands have the structure and resources to focus and serve up more customer-centric experiences that align with their consumers' needs.



MARKET LANDSCAPE



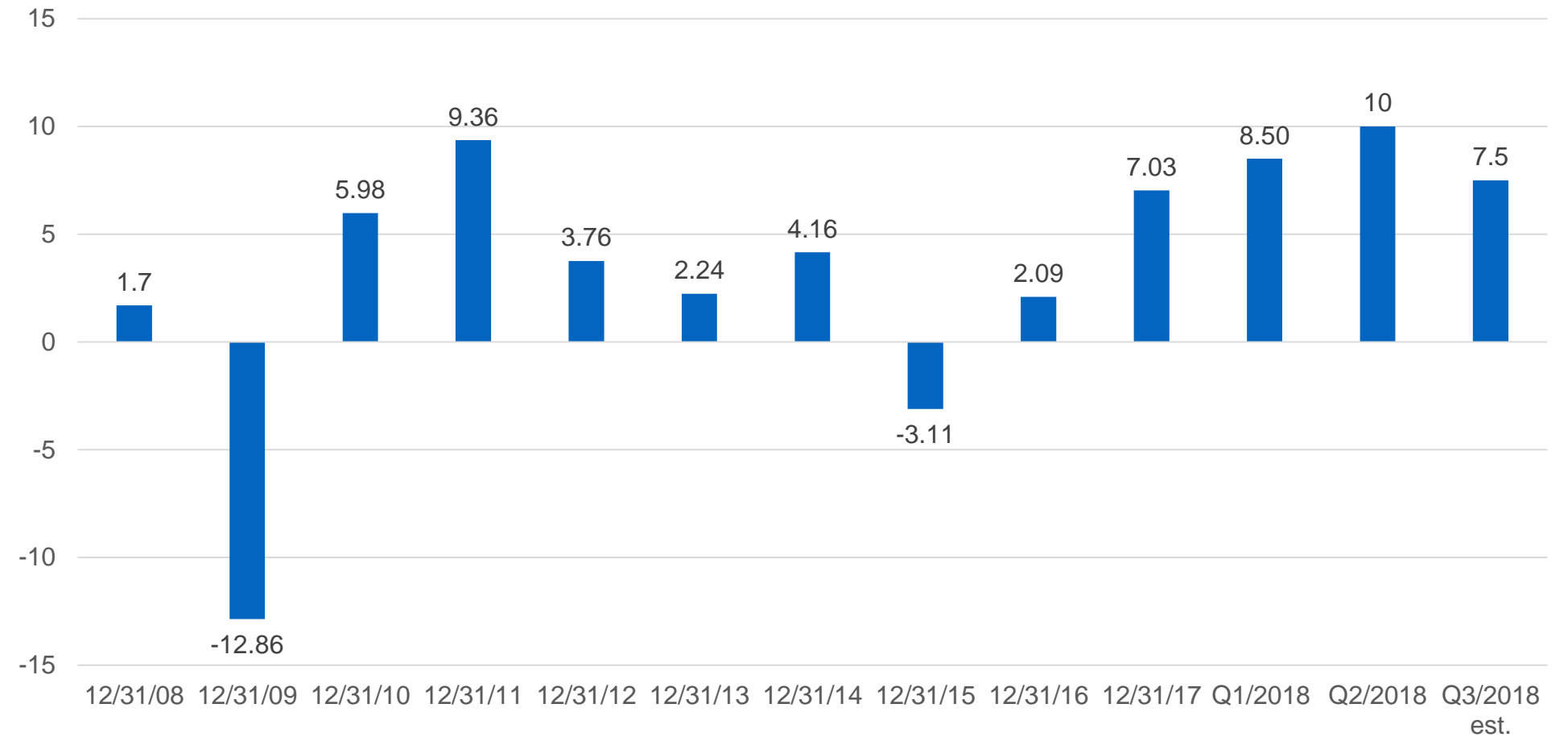
RECORD REVENUE

During Q2, the market overall saw continued record revenue growth with soaring corporate profits spilling over from Q1. In the words of one S&P Dow Jones Indices analyst, “Earnings have been good no matter how you measure them.”

Despite on-going trade worries and growing geopolitical tensions, businesses are enjoying a wave of favorable tailwinds buoyed by large tax cuts and strong economic growth.

On a per share basis (EPS), in Q2, nearly 80% of S&P 500 companies reported positive earnings surprises; a higher percentage than both one-year and 5-year trailing averages. This is the highest percentage since FactSet began tracking this data in 2008.

REVENUE GROWTH OVER LAST DECADE














Source: Standard & Poor's, Internal Estimates *

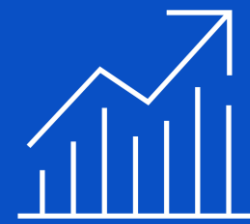
Q2 2018: REVENUE PERFORMANCE BY SECTOR

Q2 2018 was a banner quarter in revenue growth and financial performance. All 11 sectors delivered growth and positive earnings surprises during the quarter.

The 11 sectors are sorted by average revenue size. For example, Telecom had a touch under \$93B in revenue last quarter divided among seven companies. Whereas Information Technology had \$457B in revenue divided among 142 companies.

Consumer Staples has the second largest average revenue at \$8.6B across 50 companies and grew at 4.2% - a modest rate compared to other sectors.

INDUSTRIES	AVERAGE SIZE (\$MM)	GROWTH %	MAGNITUDE OF REVENUE SURPRISE %	GROWTH STRETCH %
TELECOM SERVICES 	\$13,253	1.3%	0.9%	7.1%
CONSUMER STAPLES 	\$8,603	4.2%	1.3%	-2.1%
HEALTH CARE 	\$4,924	7.1%	1.2%	-0.9%
ENERGY 	\$4,892	23.5%	1.7%	-3.1%
FINANCIALS 	\$3,283	7.1%	3.0%	-4.4%
INFORMATION TECHNOLOGY 	\$3,222	17.3%	1.3%	-3.8%
CONSUMER DISCRETIONARY 	\$3,031	9.8%	1.5%	-2.9%
INDUSTRIALS 	\$2,980	6.8%	0.0%	-0.4%
UTILITIES 	\$2,215	0.7%	0.7%	-0.6%
MATERIALS 	\$2,200	15.1%	1.8%	-4.6%
REAL ESTATE 	\$445	10.3%	2.6%	-3.1%



CONSUMER STAPLES REVENUE PERFORMANCE

As part of our ongoing Digital Strength Index (DSI) study—Isobar and alpha-DNA evaluate Consumer Staples.

FOOD & STAPLES RETAILING



FOOD PRODUCTS



TOBACCO



PERSONAL PRODUCTS



HOUSEHOLD PRODUCTS



BEVERAGES





CONSUMER STAPLES PERFORMANCE Q2: 2018

Overall for the quarter, the YoY revenue performance of the 50 Consumer Staples companies we reviewed in this report have average revenue of \$8B in Q2 2018 and 3.3% growth rate.

REVENUE PERFORMANCE FOR THE TOP 50 US CONSUMER STAPLES COMPANIES

SIZE	Average revenue generated in the most recent quarter	\$8.0B
GROWTH	YoY revenue growth generated in the most recent quarter	3.3%
% REPORTING POSITIVE REVENUE SURPRISE	% of companies beating analysts' consensus revenue expectations last quarter	64.6%
MAGNITUDE OF REVENUE SURPRISE	Average amount by which companies beat consensus revenue expectations in the most recent quarter	1.2%
EXPECTATION FOR GROWTH	Revenue YoY growth rate expected for next quarter based on the consensus revenue estimate	1.8%
GROWTH STRETCH	Expected change in YoY growth rates from the most recent quarter to next quarter based on sequential acceleration	-1.5%

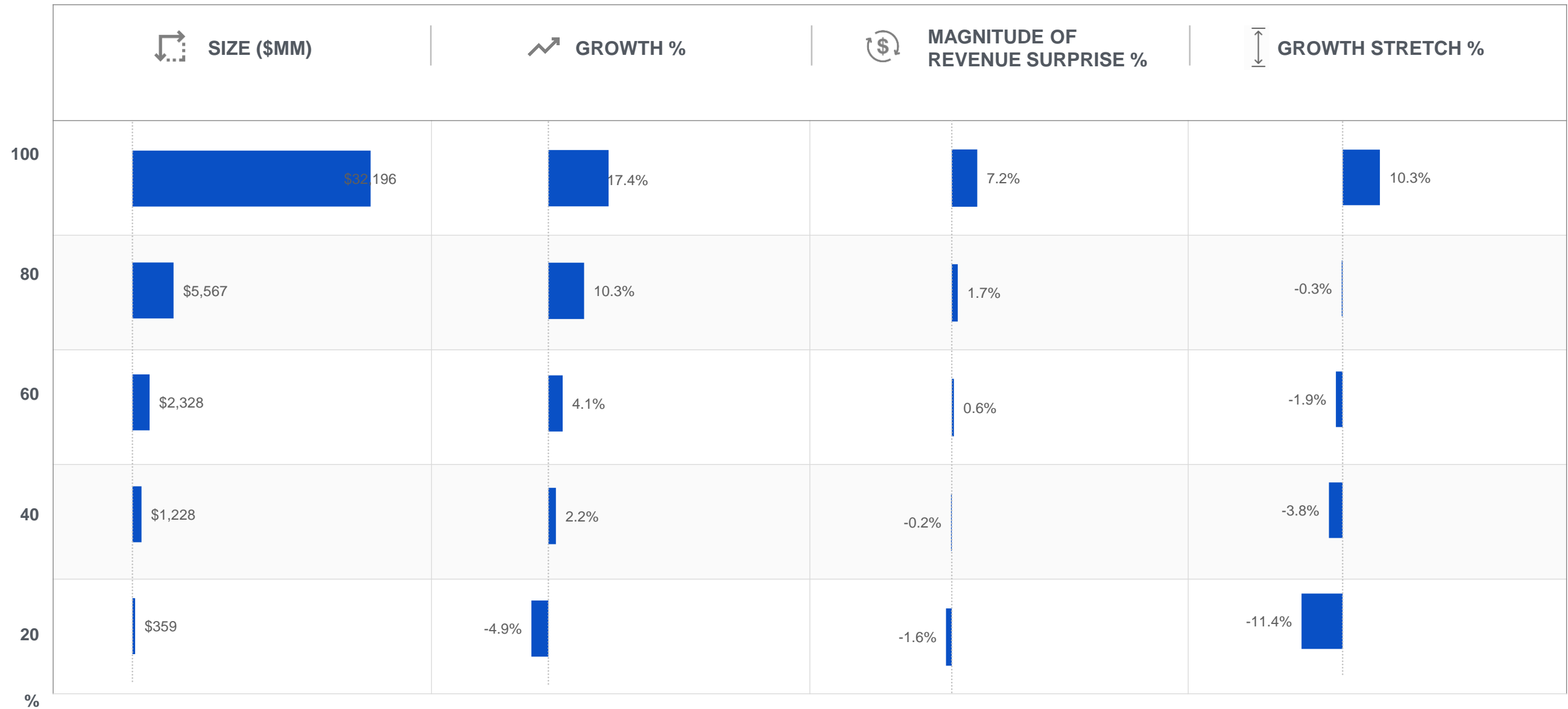
Q2 2018: CONSUMER STAPLES REVENUE PERFORMANCE BY DECILE

The Consumer Staples industry is made up a few big players, like Walmart, CVS and Kroger which fall into this category, and many more smaller companies, like Castle Brands and Craft Brew Alliance that are challenging larger players.

This results in a wide variance in revenue - the top 20% of companies have average revenue that is roughly 6 times that of the closest decile.

Most Consumer Staples companies reported positive growth. We see a wide spread in results with the top 20% reported an impressive 17.4% while the bottom 20% lost -4.9%.

The industry, and really the market as a whole, is expected to slow down which is reflected in negative Growth Stretch %s for all but the top deciles.

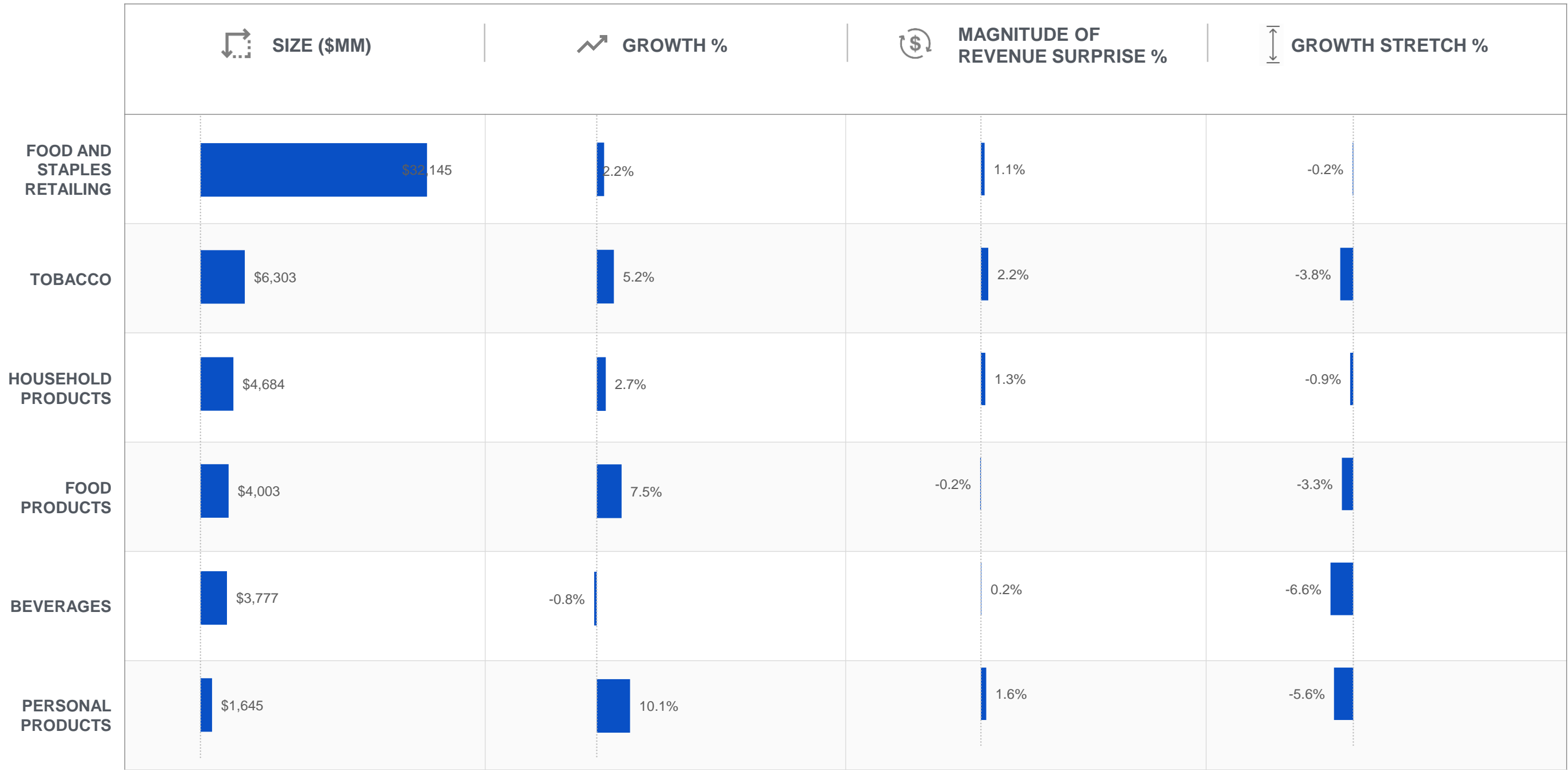


Q2 2018: CONSUMER STAPLES REVENUE PERFORMANCE BY SUB-SECTOR

Looking at the sub-sectors within Consumer Staples, Personal Products showed the greatest change in growth while Beverages was the only category to decline.

Personal Products companies saw standout growth this quarter buoyed Nu Skin Enterprises at 28% and strong quarterly results from Estee Lauder and Herbalife.

Beverages declined overall driven down by -8% YOY growth at Coca-Cola and offset by positive growth at smaller companies like Boston Beer Company and Castle Brands.





DIGITAL STRENGTH INDEX & GROWTH



THE DIGITAL STRENGTH INDEX

When dealing with digital, you're dealing with endless amounts of data. Not only is there the challenge of gathering the right data, but also how you interpret it and what it means for your business.



DIGITAL DATA

alpha-DNA collects many different types of digital performance measures from multiple data sources available commercially and publicly. The data is broad-based and includes various data types across websites, search, and social platforms. Data is sourced from multiple providers for the same type of measures to reduce noise. The data sources are continuously re-evaluated and appropriately re-weighted over time. In terms of scale, on a monthly basis, alpha-DNA tracks more than 75 billion digital consumer interactions to hone in on change in velocity across businesses.



DIGITAL BUREAU

Digital identities are defined for the top 1,000 public companies by building, maintaining, and updating a proprietary Digital Bureau of companies and brands. Entity definitions for a company need to be updated continuously, often times manually, and cannot be bought off-the-shelf. Raw digital data is then cleaned and aggregated into time series associated with each digital entity. Furthermore, aggregating all the digital entities owned by a company to represent a single stock ticker has its own weighting and algorithmic complexities. This unique dataset is a key component of the Digital Strength Index's value.



DIGITAL PERFORMANCE

A proprietary scoring system ranks the top 1,000 companies every month on their overall performance strength across digital platforms (site, search, social, app) and consumer effectiveness (penetration, engagement, popularity). A "poll of polls" approach is used to combine many different digital dimensions sourced from multiple datasets to create weighted performance scores.



CONSTRUCTING THE INDEX

Algorithms systematically establish empirical relationships between digital consumer interaction trajectories and revenue change for each of the top 1,000 companies, looking back two-to-three years in history for each stock every month starting in 2012. More than 2,400 model formulations are considered for each stock ticker at any given point in time (e.g., monthly) to make a robust assessment.



SECTOR SCORES

It's no surprise that Consumer Discretionary and Info Tech continue to lead given the high proportion of digital companies in their ranks.

When compared to the 11 sectors Consumer Staples is one of the highest performers. The industry has seen recent strength in Magnitude with the increasing prominence of D2C brands gaining traction in the market, but the lower trajectory indicates the industry is ripe for disruption as Consumer Staples companies best figure out how to meet customer needs through digital integration.

	CONS DISC	CONS STAPLES	ENERGY	FINANCIAL	HEALTH-CARE	INDUSTRIAL	INFO TECH	MATERIAL	REAL ESTATE	TELECOM	UTILITIES
# COMPANIES	212	55	68	133	109	148	158	56	79	8	41
OVERALL DSI	70	61	31	46	42	48	61	29	31	69	38
Overall digital strength (DSI) is represented on a scale of 1 to 100 Size of a company's digital presence (web, search, social)											
MAGNITUDE Volume of digital interactions	75	70	23	47	38	48	59	31	23	73	40
SHARE Share of digital relative to share of total revenue (offline + online)	70	55	24	49	40	43	63	23	52	55	33
MOMENTUM Sequential digital acceleration in recent times	51	53	52	47	51	50	52	45	48	69	54
GROWTH Forward-looking topline growth rate projections	46	44	62	48	53	57	56	55	37	35	44
TRAJECTORY Correlation of digital demand trends to overall revenue trends	55	45	44	48	51	51	52	48	52	46	46



DIGITAL STRENGTH IS A LEADING GROWTH INDICATOR BY SECTOR

While digital strength is often seen as critical for industries in the throes of disruption (e.g., media, retail), it's often assumed that it is less important for industries that are less digitally savvy (e.g., energy). However, a breakdown by sector shows that the Digital Strength Index is equally predictive of revenue growth across industries.

Even though the Consumer Staples sector overall has been growing, identified digital leaders in Consumer Staples outperformed digital laggards by 8.7%, which means on average companies in the top 30% of digital performance are disproportionally capturing the value of growth in Consumer Staples.

TOPLINE REVENUE GROWTH, BREAKDOWN BY SECTOR

(YoY% next year, average)

	▼ Bottom 30%	Average	▲ Top 30%
CONSUMER DISCRETIONARY	1.3%	4.4%	7.1%
CONSUMER STAPLES	-3.8%	2.0%	4.9%
ENERGY	-13.3%	-10.1%	14.5%
HEALTHCARE	2.1%	8.2%	14.2%
INDUSTRIALS	-1.8%	0.8%	6.6%
INFORMATION TECHNOLOGY	-3.7%	5.9%	13.8%
MATERIALS	-3.8%	-1.5%	6.9%
TELECOM SERVICES	0.6%	5.1%	9.2%
UTILITIES	1.2%	1.7%	5.7%
<i>FOLLOWING YEAR STOCK PRICE</i>	8.9%	10.4%	12.4%



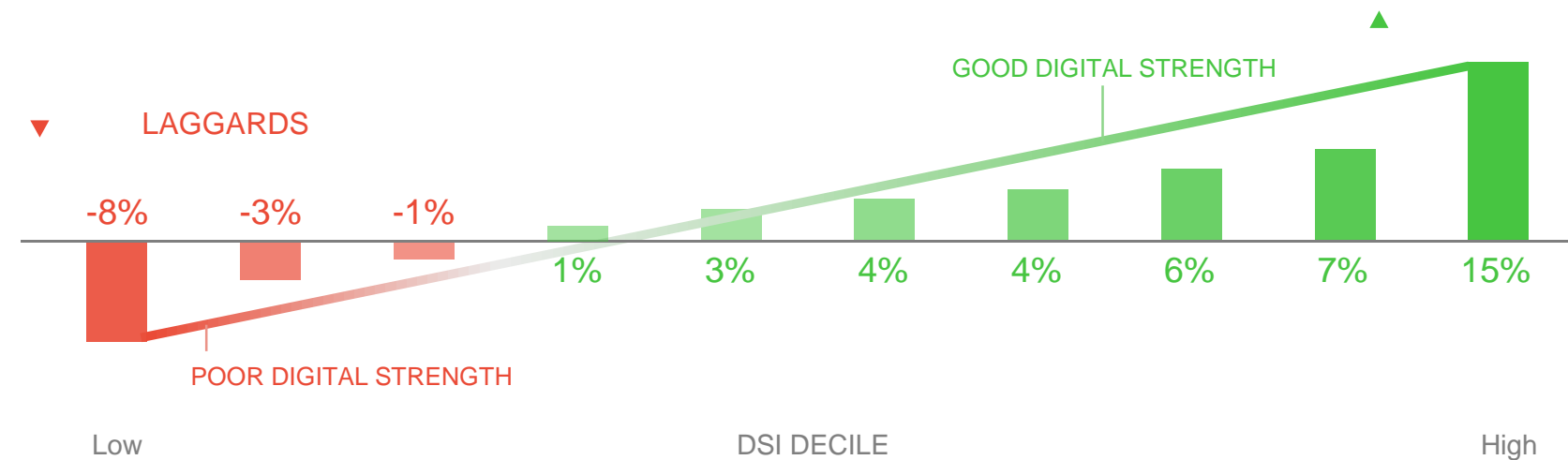
DIGITAL STRENGTH IS A STRONG PREDICTOR OF REVENUE GROWTH

The first question to be asked of any index is whether it is truly predictive. In this case, the top decile of digital strength companies have next year revenues of +14.5%, whereas the bottom decile has -7.8%—a 22.3-point difference between laggards and leaders in a single year. The index is even predictive in a shorter window, with a nearly 13-point difference between top and bottom companies in terms of beating quarterly revenue estimates.

Compared to last year's Topline Report, the top decile revenue growth YOY% increased by 4.9%. While digital may not be the only factor affecting this increase, as the world becomes increasingly more digital, the gap between the most and least digitally savvy companies seems to be expanding.

TOPLINE REVENUE GROWTH YOY%

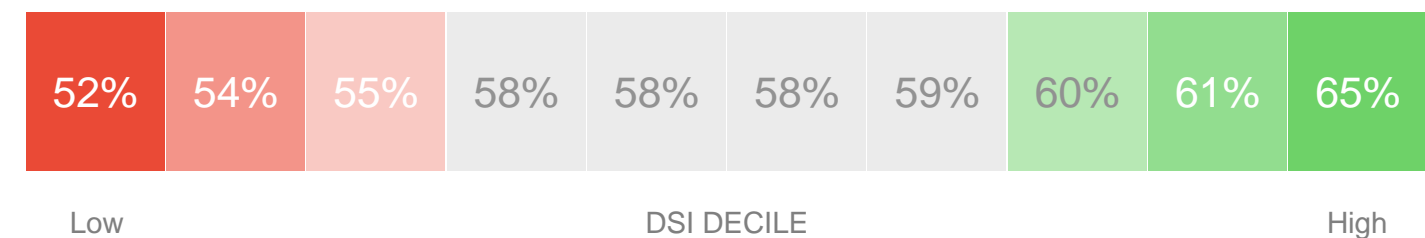
Top 1,000 companies rank order by our proprietary Digital Strength signal every month



% OF COMPANIES BEATING REVENUE ESTIMATE

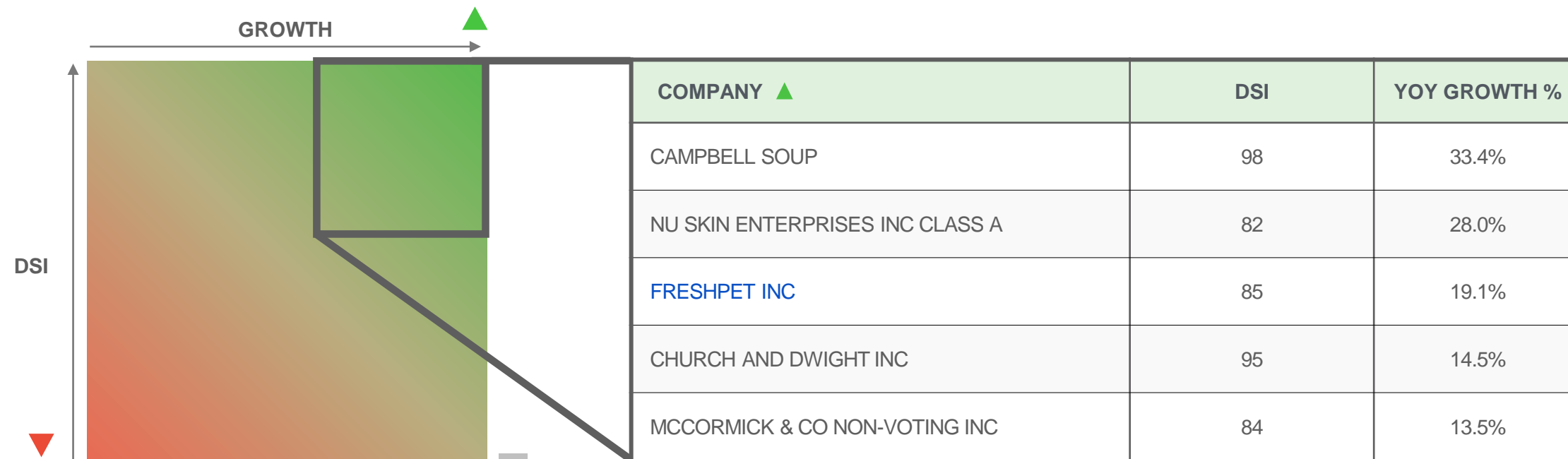
(consensus expectation next quarter)

Top-ranked stocks based on Digital Strength Index have beaten quarterly consensus revenue expectation ~65% of the time, compared to a revenue beat rate of only ~52% respectively for bottom-ranked stocks.



HIGH GROWTH AND HIGH DSI

Companies with a track record of strong growth and high DSI are well positioned



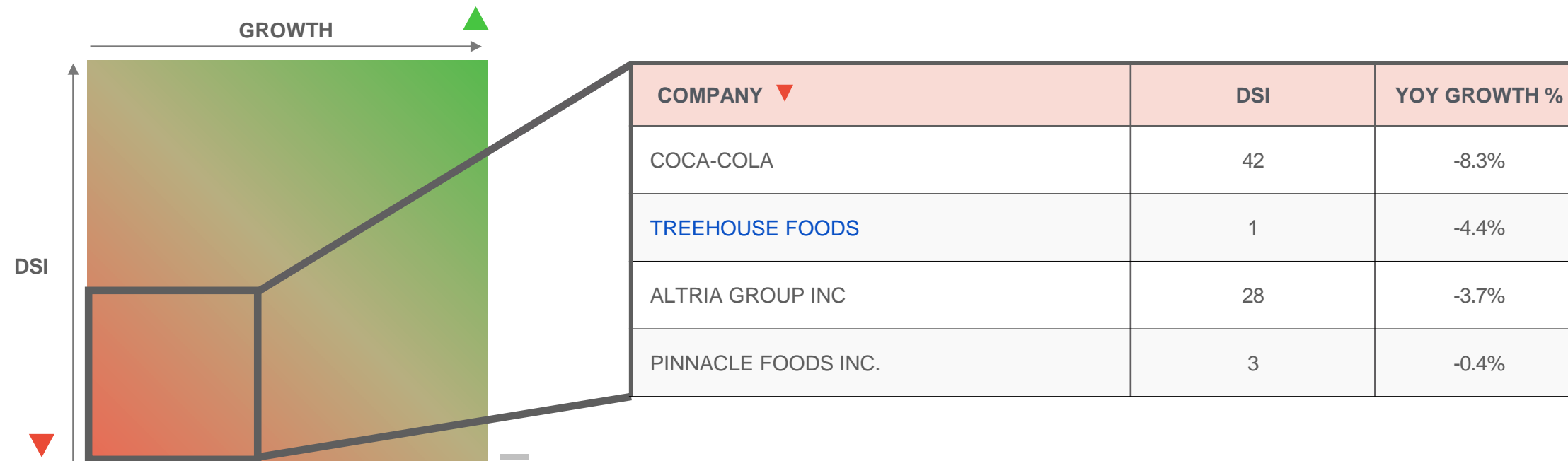
A CLOSER LOOK

[FreshPet](#), a manufacturer of natural, fresh products for dogs and cats, has shown consistent growth and also has a high DSI score. To set themselves apart in an increasingly crowded space, they are continually focused on innovation, understanding pet food customers and leveraging the emotional connection through digital means.

To activate an omni-channel experience and connect with pet owners in more meaningful way, they have launched a variety of initiatives, such as a new podcast that just wrapped season one called “Pet Parents, Oversharing.” Another more socially heavy initiative, that launched in Q4 of 2018, is a promotion called “Tattoo Pawlor” where consumers can upload a video or photo highlighting how they show love to their pet using the hashtag #TattooPawlor on social media⁵. 10 winners will get a free tattoo from a NYC shop, with a permanent way to showcase their love for their pets.

DECLINING GROWTH AND LOW DSI

Companies with a track record of poor growth and low DSI suggests serious headwinds in the future



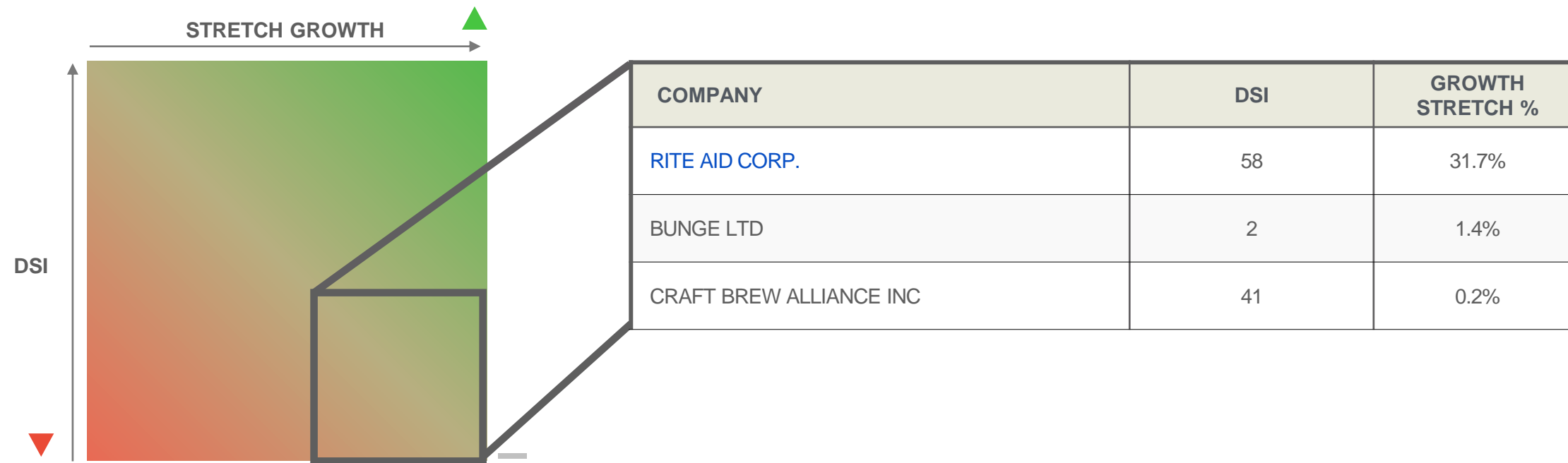
A CLOSER LOOK

[Treehouse Foods](#), a food processing company who is the largest private-label supplier in the United States, has had a consistently low DSI Score for the past several quarters – dropping from a DSI of 16 in Q1 of 2018 to 1 in Q2. As a B2B brand this is not necessarily surprising. Companies that focus on private-label distribution to grocery and foodservice often focus the most on improving their operating margins. Treehouse has done just that. The company has a very focused 2020 strategic plan⁶ to restructure and realign the business while expanding offerings through acquisitions.

While these foundational efforts should be the primary focus, we believe there is an opportunity to incorporate digital initiatives with buyers and customers. Millennials aren't just making purchase decisions within the B2C space - as of 2017, over 70% of millennials being involved in product or service purchase decision-making at their companies⁷. As digital natives, they will naturally bring their consumer habits to this space and the companies that serve up the digital experiences they expect will be the ones poised to win.

HIGH STRETCH AND LOW DSI

Companies with strong DSI in which growth is expected to accelerate the most, but are at risk of disappointing due to weak digital fundamentals



A CLOSER LOOK

Rite Aid, the third largest drugstore chain in the United States, has had a very tumultuous past couple of years. Between a failed merger with Walgreens in 2017 and the recent termination of the Albertsons acquisition in 2018, Rite Aid now needs to focus less on potential partners and more on its own brand and digital growth. Luckily, before the merger and acquisition focus, the retailer was at the forefront of utilizing digital technology to create an enhanced shopping experience. In 2016, Rite Aid launched the largest installment of beacon technology in a retail setting, partnering with inMarket to deliver ecommerce-style personalizing to shoppers who are in the store. That, coupled with a DSI score that's in-line with our retailer average of 60, shows that they certainly aren't lagging in the space. However, a focused effort on digital innovation is critical to continue to set itself apart from key competitors in the space and reduce the growth stretch percentage.



BRAND LEADERS & LAGGARDS



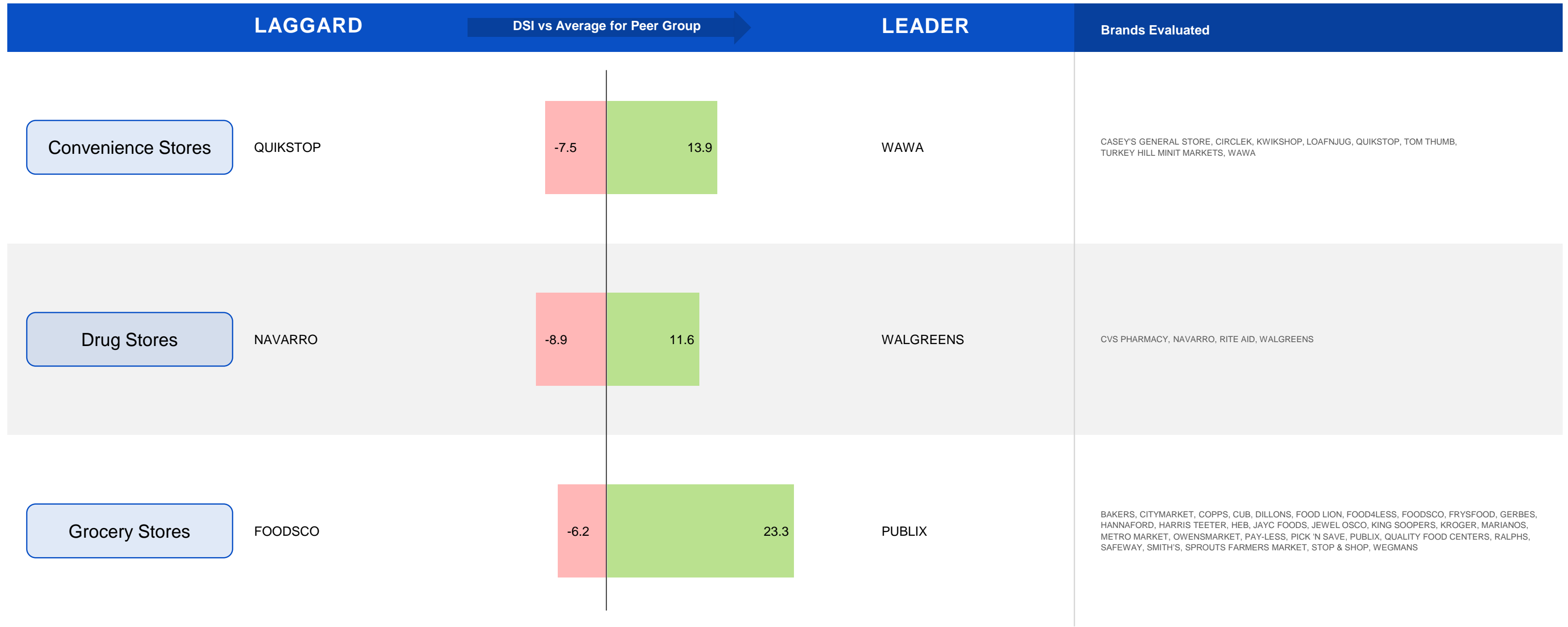
LEADERS AND LAGGARDS

To better understand the digital strength intricacies within the Consumer Staples category itself we analyzed data on over 300 brands across 39 peer groups to better understand who is showing digital leadership and resilience and who may benefit from focusing more on their digital ecosystem.

While the brands evaluated are by no means a comprehensive list it was interesting to understand within some of the larger companies which brands have a significantly stronger digital foothold than others and what qualities are setting them up for success. Each of the brands were evaluated individually within their peer group to eliminate any biases across categories to provide the most impartial evaluation possible.

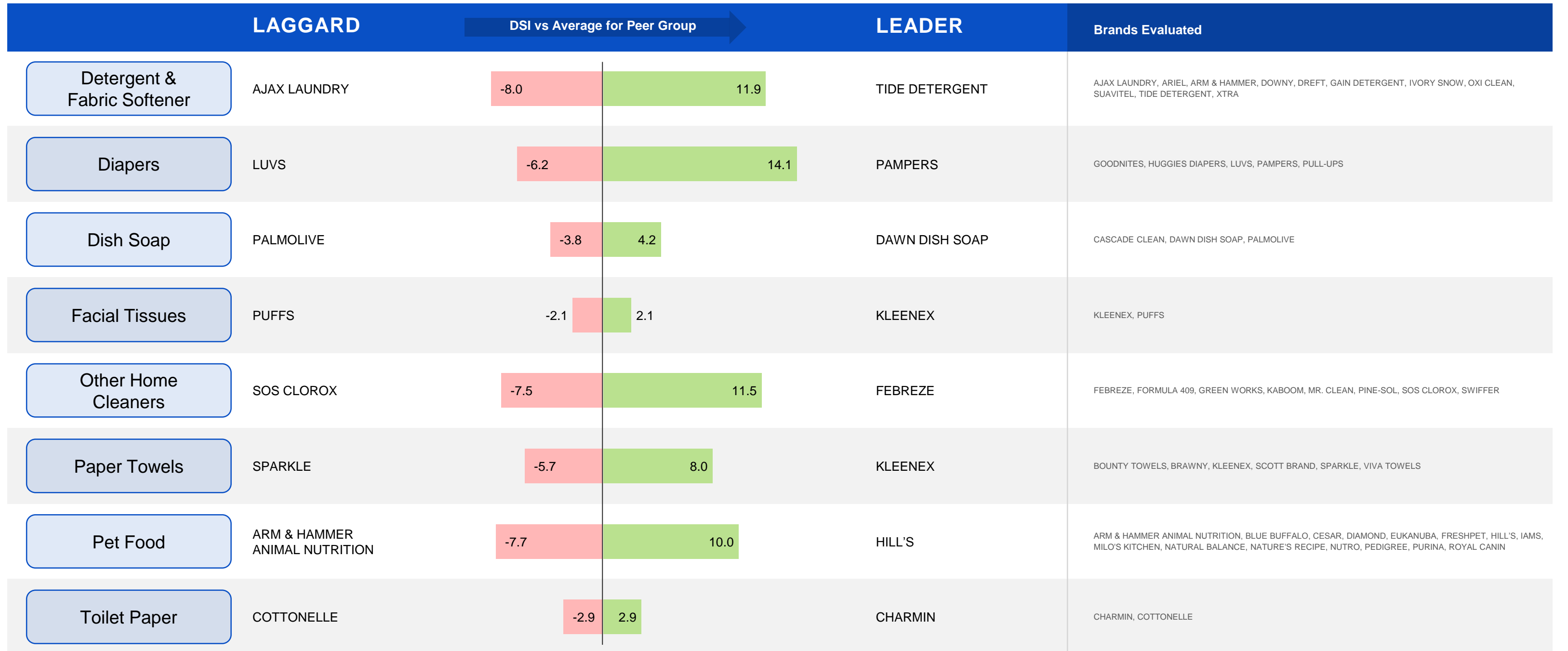
LEADERS / LAGGARDS BY DIRECT PEER GROUP

Consumer Staples Retailers



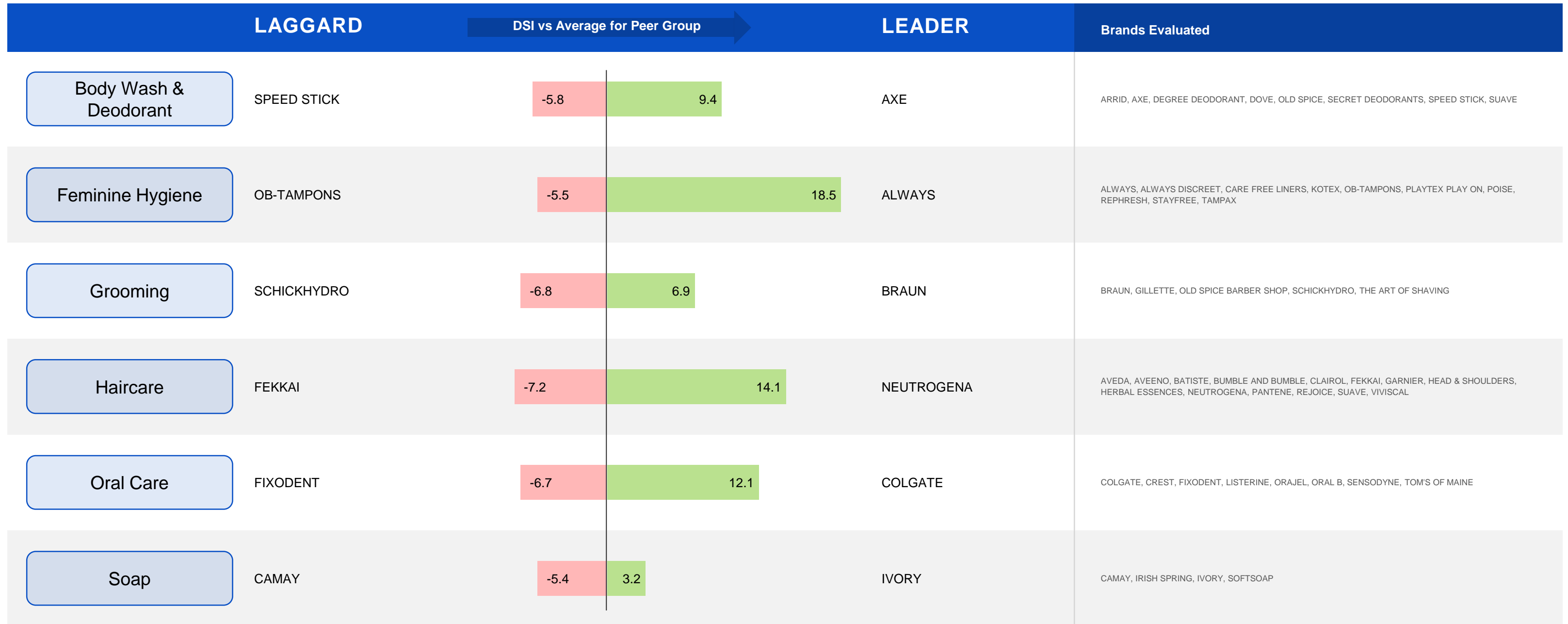
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Household Staples



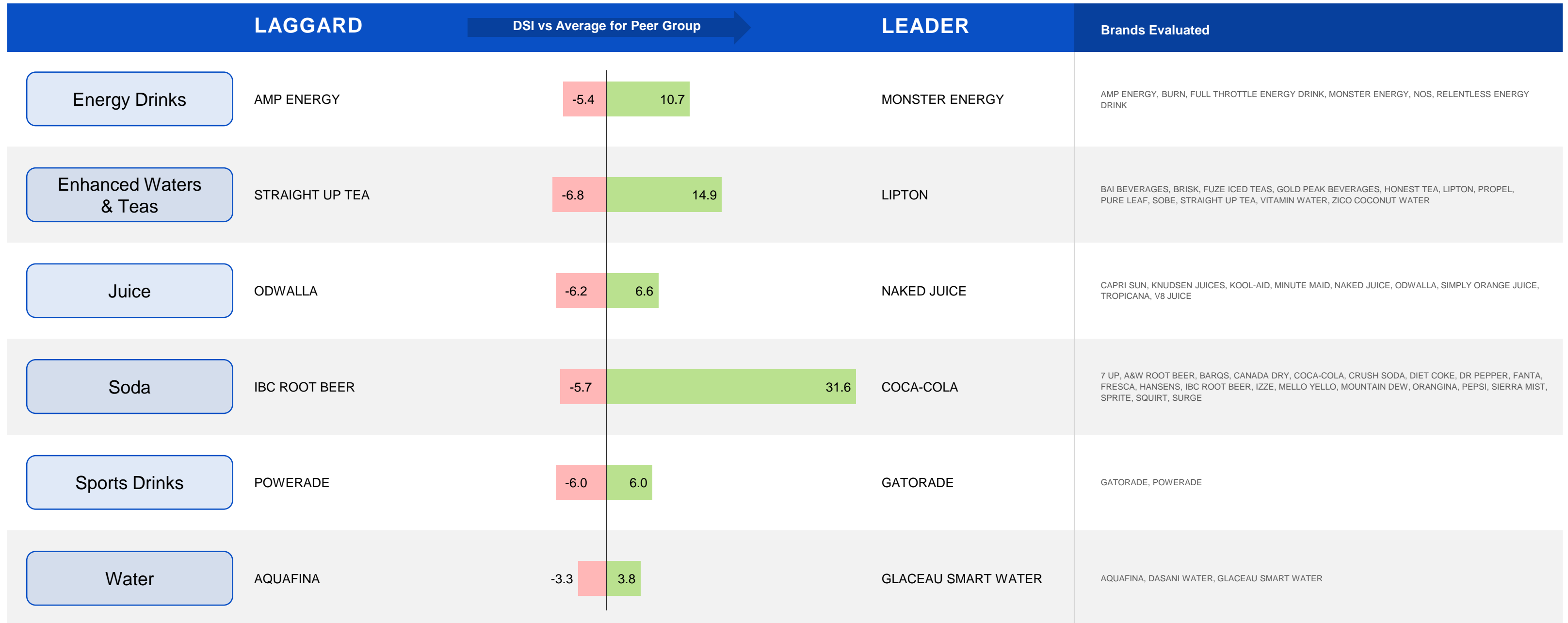
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Personal Care



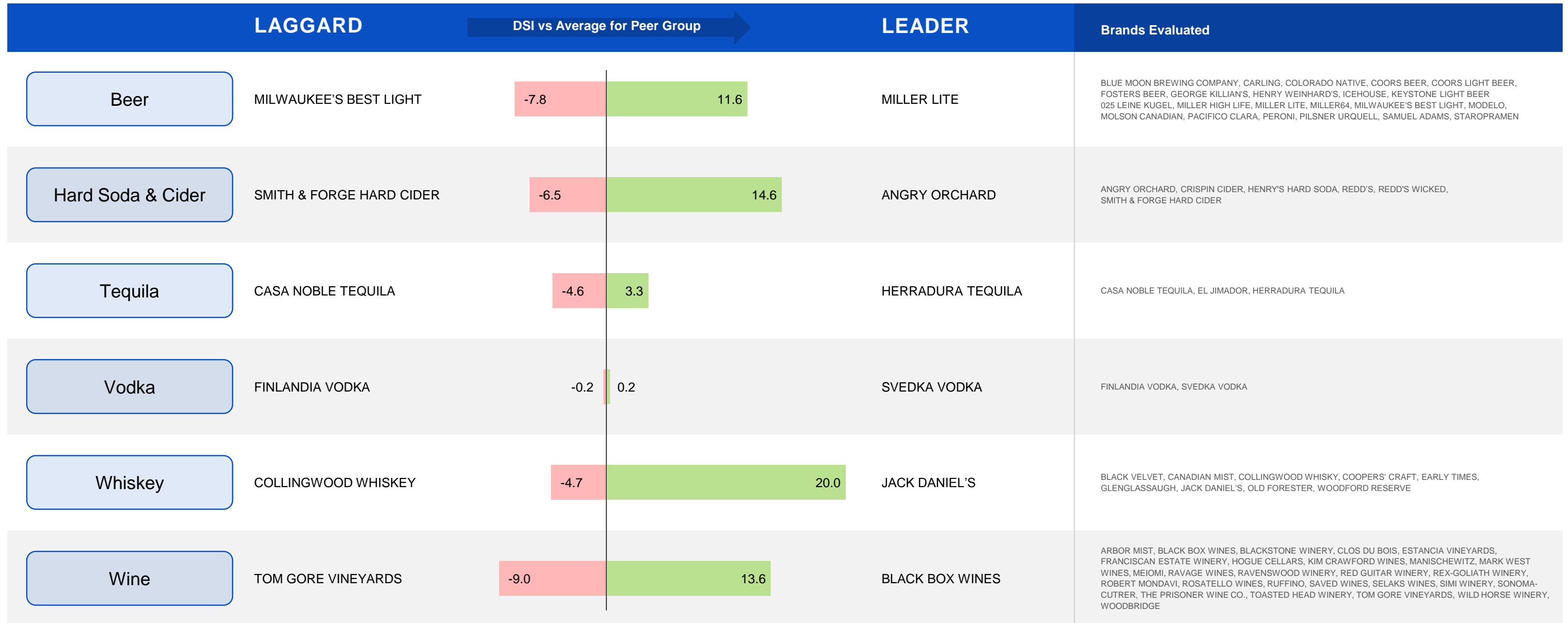
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Non-Alcoholic Beverages



LEADERS / LAGGARDS BY DIRECT PEER GROUP

Alcoholic Beverages



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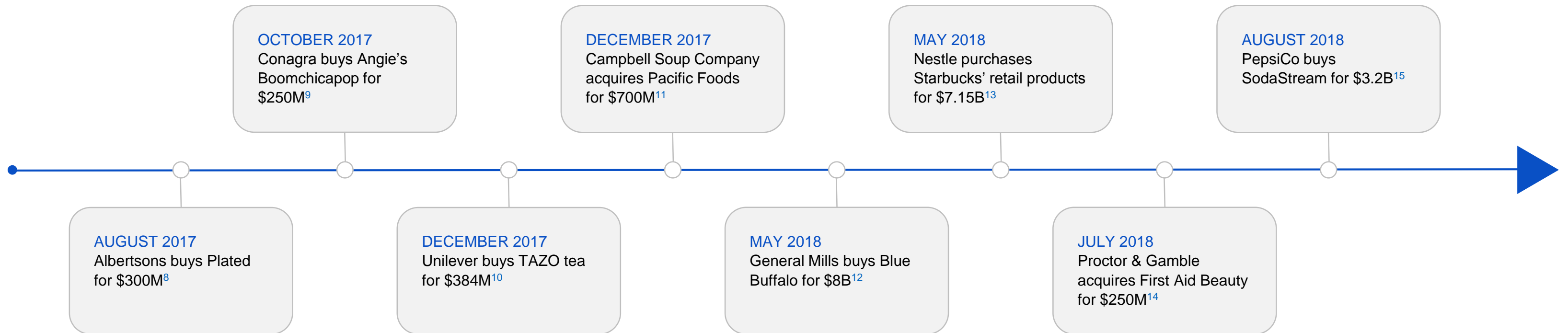
Food



LANDSCAPE

LEGACY CONSUMER STAPLES BEHEMOTHS ARE ACTIVELY FINDING WAYS TO GROW AND TAKE BACK MARKET SHARE

As the industry evolves at a faster pace, large players are finding they're simply not agile enough to compete against category and market disruptors. These niche players, who evolved and built their business models as digital natives, leveraged their ability to be nimble to take greater risks with product innovation and distribution. As of 2018, mergers and acquisitions in the Consumer Staples industry has reached a 15 year high -- and is not expected to slow down anytime soon. It's a win-win. These larger, legacy companies have the infrastructure and operations that can support these smaller players who have an established and trusted brand in the e-commerce space. Online sales are only going to increase, and gaining that share of spending is critical for sustainable growth while becoming more relevant with a shifting demographics and needs.



TRADITIONAL, CONVENTIONAL GROCERY STORES NEED TO SPEED UP THEIR TRANSFORMATION TO SURVIVE

Over 50% of consumers are willing to spend money to save time when shopping¹⁶, making on-demand services that provide instant gratification the new normal across the board.

While the Amazon acquisition of Whole Foods certainly increased the urgency for traditional grocery stores to “step up their digital game,” the overall consumer need for a more personalized and convenient experience with grocers has been a long time coming. But, it’s not a one-size-fits-all solution. It’s expensive, daunting and difficult for conventional chains to offer home delivery, as it requires significant shifts in store operations and layouts. And, there are no guarantees grocers who make significant shifts will see incremental revenue, especially by the time changes are implemented.

To that end, conventional, retail grocers are testing as much as possible, making calculated bets to try solutions that are going to give them the competitive edge with consumers in their markets, both behind the scenes to drive operational efficiency as well as public facing to improve the ever evolving customer experience.

Scan & Go

Waiting in long lines at checkout is a top consumer pain point. To facilitate a faster experience, grocers are testing different kinds of contactless technology. Amazon Go is a clear leader in the space, but competitors, such as Kroger with their “Scan, Bag, Go” concept rolling out to 400 stores in 2018¹⁷ and Dollar General piloting a scan and go app in Nashville¹⁸, aren’t far behind.

Speedy Home Delivery

Fast home delivery is widely available in most markets, with Instacart and other third-party solutions continually gaining traction every day. But, to truly elevate the on-demand experience grocers are looking to enhanced technology to gain a competitive edge. In August, Kroger unveiled a pilot of driverless delivery vehicles in AZ with Nuro to expand it’s same day delivery capabilities²¹, launching a potential delivery game-changer for the industry.

In-store Robotics

To alleviate common problems such as out-of-stock items and floor hazards, several grocers across the country are testing aisle-scanning robots. From Mary the Robot at Food Lion¹⁹, to Tally at Schnucks²⁰, these robots automate manual tasks to allow employees time and energy to focus more on providing superior customer service.

Smart Home Integration

Recent patents filed by Walmart that outline the management of smart appliances using blockchain technology suggest a new wave of IoT that supports a smart home environment with automated monitoring and re-ordering²².

SIMPLIFICATION, AUTHENTICITY AND TRANSPARENCY ARE CRITICAL FOR BRANDS TO CONNECT WITH CONSUMERS

Between the shift in shopper demographics, the evolution of digital communication, and the increase in brands across all categories, the Consumer Staples industry is a crowded and noisy space to live. Brand conversations are unlimited and chaotic and brand owners know they need to be present at every possible touchpoint to manage perceptions and ensure their products fit seamlessly into their consumers' lives.

Digital transformation has created an opportunity to create more of a personality for brands. No longer do consumers rely on a picture on the front of a box and nutrition labels. Brands can now connect with their customers to highlight everything from how products are used, to what positive impact the brand has beyond sustenance. These lifestyle integrations are critical, as they create an authentic brand personality that can be woven into every customer conversation and create preference and loyalty that naturally translates into advocacy with the intended audience.

49% of Millennials and 44% of Gen Xers will pay a premium for food that offers benefits beyond basic nutrition²³, making it imperative for brands to highlight these benefits in communication. Wellness initiatives and environmental concerns are only becoming more important for brands to highlight where appropriate in their communications and interactions with customers.

Simplification of Choice

Companies who reduce the overwhelming burden of choice within the category are gaining serious traction. Brandless is a good example of this. While it's still a brand the products are kept at a low price point of \$3 each thanks to direct to consumer e-comm channels and have product attributes that appeal to selective consumers who are looking for organic, non-GMO and cruelty-free products.

Transparency Creates Authenticity

Buzzwords from "natural" to "clean" have created confusion and distrust with consumers, as they often don't mean much and can't be proven or quantified. Brands are recognizing they can't rely on these kinds of labels and are instead communicating with simple language and using a "less is more" mentality. When companies are clear about what they believe in and how they actually put those beliefs into practice they can transition from offering functional benefits to making real emotional connections with their consumers.

IMPLICATIONS



Digital strength may be the most important determinant of business health and future growth not being measured or managed by enterprises today. Managing against this measure is essential for all businesses that want to grow—if not survive.

Not only do we believe companies should be tracking their Digital Strength, they should also approach digital the same way that digital businesses do: build digital scale and strength before pursuing monetization. All too many traditional corporations make the mistake of applying the same metrics and hurdle rates to digital as they do to their other channels.

Companies should rethink how they develop business cases for possible digital investments.

To properly account for the disproportionate impact of digital on future revenues and shareholder value, companies might want to value digital revenue and digitally-influenced revenue higher than traditional channels.

They need to consider whether a loss of market share is an indication that they are not investing enough in digital. Few business cases include the cost of doing nothing, but they should.

SOURCES

1. Mintel; U.S. Grocery Retailing, July 2018
2. <https://adage.com/print/315195>
3. <https://www.statista.com/statistics/632734/millennials-share-of-retail-expenditure-in-the-us/>
4. Mintel; U.S. Grocery Retailing, July 2018
5. <https://www.mediapost.com/publications/article/327092/freshpet-creates-pop-up-tattoo-pawlor.html>
6. <https://www.zacks.com/stock/news/328862/2020-strategy-buyouts-aid-treehouse-foods-input-costs-high>
7. <https://hbr.org/2018/03/how-digital-natives-are-changing-b2b-purchasing>
8. <https://www.cnbc.com/2017/09/22/how-shark-tank-business-plated-sold-to-albertsons-for-300-million.html>
9. <https://www.chicagotribune.com/business/ct-biz-conagra-boomchickapop-earnings-20170928-story.html>
10. <https://www.forbes.com/sites/maggiemcgrath/2017/11/02/starbucks-to-sell-tazo-tea-brand-to-unilever-for-384-million/>
11. <https://www.campbellsoupcompany.com/newsroom/press-releases/campbell-completes-acquisition-of-pacific-foods/>
12. <https://www.reuters.com/article/us-blue-buffalo-pet-m-a-general-mills/general-mills-moves-into-pet-food-with-8-billion-blue-buffalo-deal-idUSKCN1G7185>
13. <https://www.bbc.com/news/business-44027773>
14. <https://globalcosmeticsnews.com/procter-gamble-snaps-up-first-aid-beauty-for-approx-us250-million/>
15. <https://www.cnbc.com/2018/08/20/pepsico-to-buy-sodastream-for-3point2-billion.html>
16. Mintel; U.S. Online Shopping, May 2018
17. <https://www.forbes.com/sites/bernardmarr/2018/07/20/how-us-retail-giant-kroger-is-using-ai-and-robots-to-prepare-for-the-4th-industrial-revolution/>
18. <https://www.retailwire.com/discussion/dollar-general-pilots-scan-go-tech/>
19. <https://progressivegrocer.com/food-lion-pilots-robots-spot-out-stocks-hazards-pricing-issues>
20. https://www.stltoday.com/business/local/robot-workers-will-soon-be-roaming-the-aisles-at-schnucks/article_1b5bcb10-84f3-580c-b0f9-6b889cc4ce28.html
21. <https://www.digitaltrends.com/home/kroger-driverless-deliveries/>
22. <https://cointelegraph.com/news/recent-walmart-patent-application-describes-blockchain-managed-smart-appliances>
23. <https://www.statista.com/study/19372/us-millennials-grocery-shopping-behavior-statista-dossier/>

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Arun is co-founder and Managing Partner at alpha-DNA. Through his 20+ year career, he has led data-centric capabilities transformation across Fortune 500 brands. He has a successful track record of designing and monetizing information-based strategies across consumer finance, retail, e-commerce, and advertising businesses. Prior to founding alpha-DNA in 2014, Arun was Senior Vice President, Global Analytics & Research at The Western Union Company. He has also held leadership roles at Sears Holdings, GE Capital (Analytics Center of Excellence), and STARCOM (Media Research). Arun holds a Masters degree in Marketing from MICA and a Bachelors in Business Administration from Loyola College.



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Rod is co-founder and Partner of alpha-DNA. He has spent over a decade leading customer and digital analytics transformation inside large global financial services businesses. Rod is passionate about creating structure around unstructured digital data, making it truly actionable for improved high-value decisions. Prior to alpha-DNA, Rod was Vice President, Global Analytics & Research at The Western Union Company where he led their digital analytics, pricing strategy, and account-based relationship optimization teams. He has also held roles at Capital One where he was responsible for credit risk management and policy, offer strategy, and customer value optimization. Rod has a BS degree in Economics from Duke University.



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Tonya has over 16 years of experience delivering large-scale digital solutions in a variety of industries. As a trusted advisor, Tonya collaborates closely with her clients across all aspects of digital project delivery to ensure that expectations are exceeded at each stage. Her past work has varied from business planning, consumer research, and strategy development to design, build, and support of enterprise-scale platforms to marketing campaign planning, execution, and optimization.

Tonya was a founding member of pioneering digital agency Roundarch, which became Isobar US in 2013. Her clients have included Wyndham Vacation Ownership, Exelon, Country Financial, Sony, Time Warner Cable, and Northern Trust. Tonya has a BS and MS in Industrial Engineering from the University of Michigan.



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As a strategy director Jennifer has spent over 15 years helping businesses develop insights into actionable results through a combination of theoretical planning and analytics. With both agency and client-side experience she has collaborated with a diverse range of B2C and B2B clients focused on insight mining, integrated marketing, brand positioning and multi-channel demand generation programs.

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