



# GROWTH: THE DIGITAL STRENGTH INDEX

STAYING ON TOP OF A CONTINUOUSLY EVOLVING MARKETPLACE

*Q3 2017*

isobar +  alpha-DNA



# A LOOK BACK AT Q3 2017

For our first Quarterly Report, Isobar and alpha-DNA take a look back at Q3 2017 and analyze the past quarter's growth and the future quarter's projected growth through a lens of Digital Strength to identify those companies and industries on the right track or at risk.

The web by its very nature creates real-time, comprehensive data about online consumer behavior. Digital behavior is fundamentally correlated with online and offline consumer demand, both in B2C and B2B contexts. Customers not only buy products and services online, but also compare, research, seek support, recommend, and review them, extending the applicability of online behavior into the offline world. Digital is a primary channel for both generating consumer demand and translating consumer demand into revenue. Digital strength is a key driver of revenue, and sharp changes in digital strength often manifest in a company's future revenue performance.

However, market expectations (i.e., sell-side consensus estimates) lack contemporaneous, company-specific, fundamental data. Consumer demand and online engagement metrics across digital sources can better "predict the present" and signal trajectory changes in a company's growth.

Isobar and alpha-DNA have partnered to create the Digital Strength Index (DSI) for the top 1,000 public companies in the U.S. The Index is based upon over five years of data gathering, analysis, and benchmarking. Between 2012 and 2016, top-ranked stocks based on Digital Strength have grown topline ~10% and beaten quarterly consensus revenue expectations 64% of the time, compared to a decline in topline of ~8% and a revenue beat rate of only 46% respectively for bottom-ranked stocks. Further illustrating the link between Digital Strength and shareholder value, based on this Index, Leaders and Laggards consistently have significantly different stock price appreciation in the following years. This analysis holds regardless of the growth or digital maturity of the sector.



# REVENUE PERFORMANCE



# THE DIGITAL STRENGTH INDEX Q3: 2017

Overall for the quarter the YoY revenue performance was strong. Growth generated was 5.6% where over half of the companies beat expectations and as a group surprised to the upside. Future growth looks to remain stable and consistent with last quarter with no expectation of acceleration.

## REVENUE PERFORMANCE FOR THE TOP 1000 COMPANIES

<b>SIZE</b>	Average revenue generated in the most recent quarter	<b>\$3.23 BN</b>
<b>GROWTH</b>	YoY revenue growth generated in the most recent quarter	<b>5.6%</b>
<b>% REPORTING POSITIVE REVENUE SURPRISE</b>	% of companies beating analysts' consensus revenue expectations last quarter	<b>64.7%</b>
<b>MAGNITUDE OF REVENUE SURPRISE</b>	Average amount by which companies beat consensus revenue expectations in the most recent quarter	<b>1.8%</b>
<b>EXPECTATION FOR GROWTH</b>	Revenue YoY growth rate expected for next quarter based on the consensus revenue estimate	<b>5.5%</b>
<b>GROWTH STRETCH</b>	Expected change in YoY growth rates from the most recent quarter to next quarter based on sequential acceleration	<b>-0.1%</b>

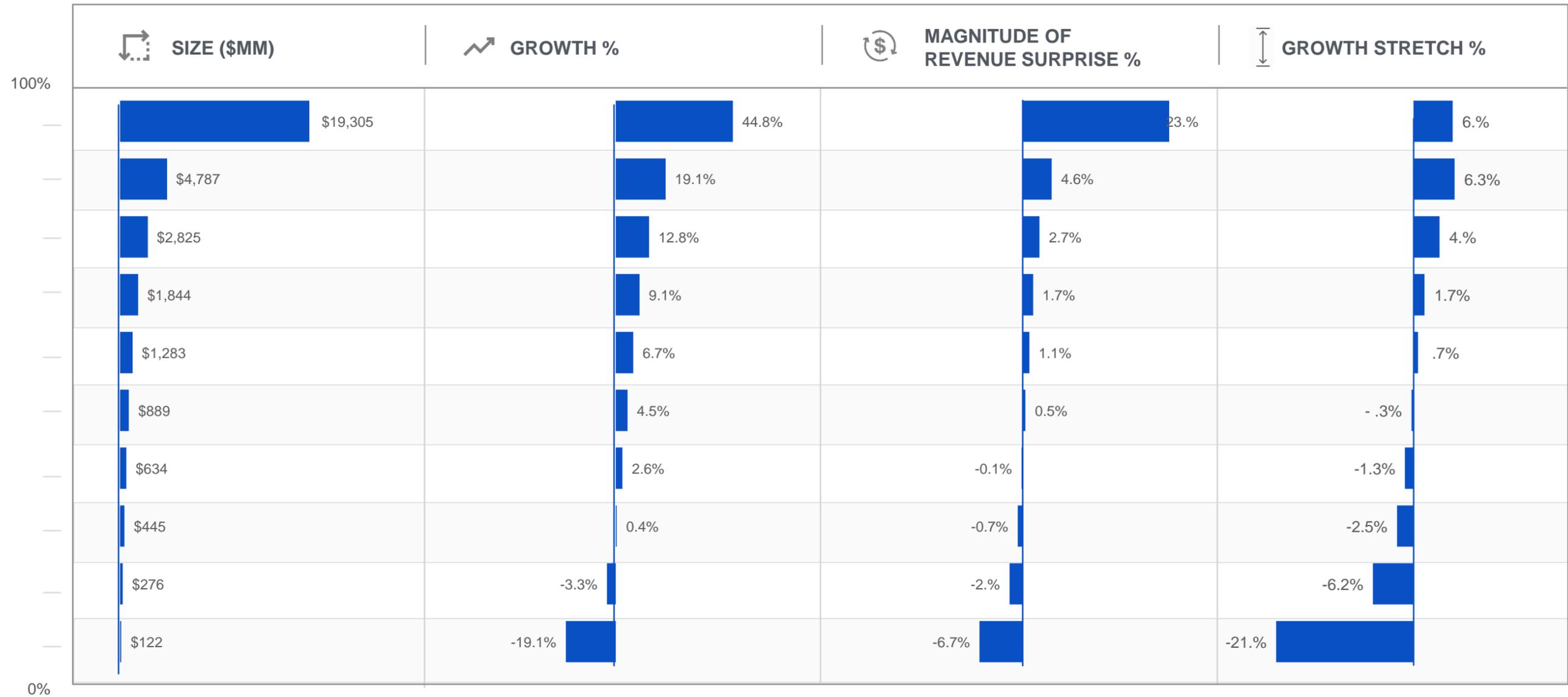
# Q3 2017: TOP 1,000 – REVENUE PERFORMANCE BY DECILE

This quarter, the top 10% of the top 1,000 public companies in the U.S. outperformed the remaining 90% combined. They beat consensus expectations and have enviable acceleration.

The bottom 20% disappointed to the downside with overall negative growth. The future isn't looking much better.

The top 10% revenue was \$19B compared to the bottom 50% which accounted for \$2.3B.

80% of the companies had positive growth and 50% look to accelerate their growth.



# Q3-2017: TOP 1000 - REVENUE PERFORMANCE BY SECTOR

The 11 sectors are sorted by average revenue size. For example, Telecom had \$94M in revenue last quarter divided among eight companies. Whereas, Consumer Discretionary had \$515M in revenue divided among 191 companies.

Regarding growth, Energy showed strong YOY results, which is not surprising given how bad it had been in the past. IT, Industrials, and Materials were other standouts last quarter.

As expected, the revenue surprise is correlated with the growth. Energy, Financials, IT, Industrials, and Materials showed quite positive surprise magnitude. Overall it was a solid quarter for earnings.

INDUSTRIES	AVERAGE SIZE (\$MM)	GROWTH %	MAGNITUDE OF REVENUE SURPRISE %	GROWTH STRETCH %
TELECOM SERVICES 	11,781	0.1%	-0.3%	0.8%
CONSUMER STAPLES 	8,553	4.3%	0.5%	-0.2%
HEALTH CARE 	4,430	4.3%	-0.2%	0.2%
ENERGY 	4,210	18.4%	2.7%	-2.9%
FINANCIAL 	3,104	2.8%	6.4%	-4.6%
INFORMATION TECHNOLOGY 	2,871	12.2%	2.9%	-0.1%
INDUSTRIALS 	2,819	7.2%	1.4%	-0.3%
CONSUMER DISCRETIONARY 	2,698	0.6%	1.0%	1.6%
UTILITIES 	2,364	-2.2%	-0.2%	5.3%
MATERIALS 	1,991	6.6%	2.2%	3.2%
REAL ESTATE 	450	4.5%	1.1%	-0.3%



# DIGITAL STRENGTH INDEX & GROWTH

# HIGH GROWTH AND HIGH DSI

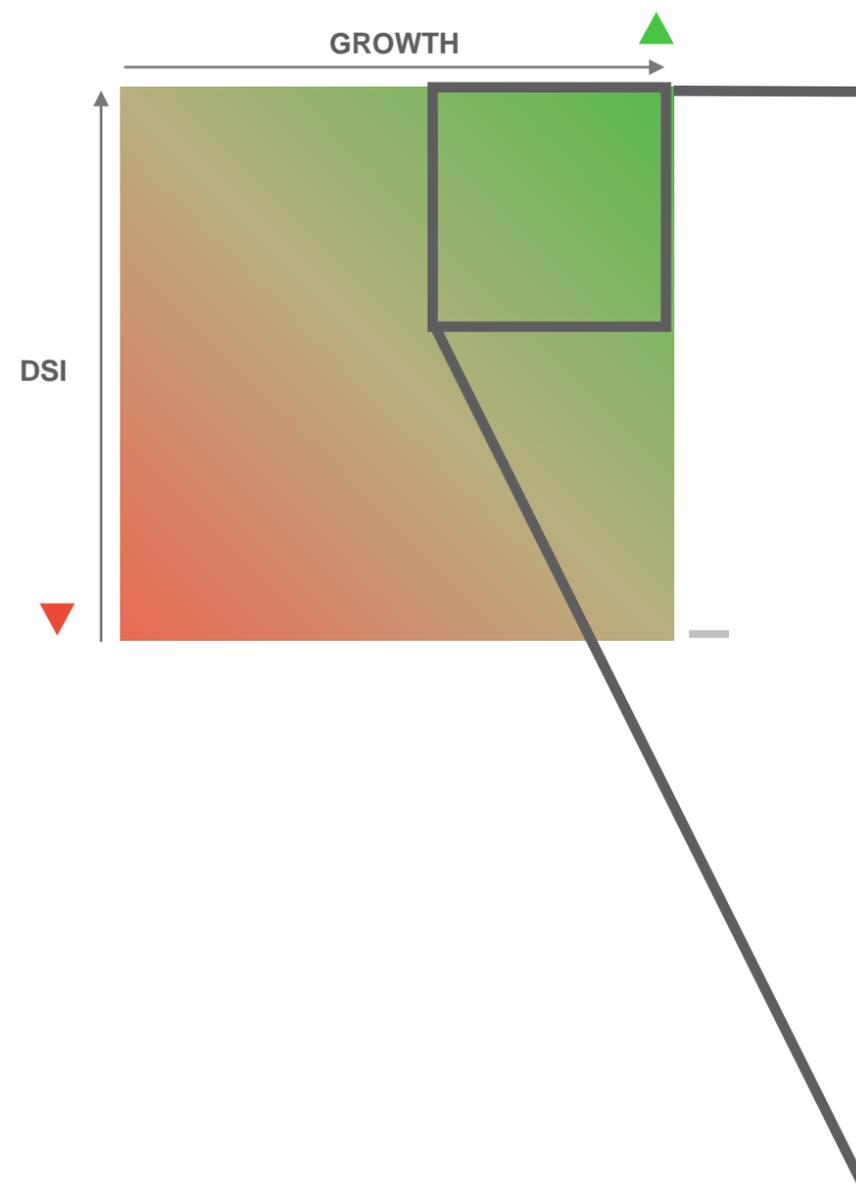
Companies with a track record of high growth and high DSI are well positioned

**Amazon** continues to expand its eCommerce empire into new products, optimize its logistic efficiencies with Prime Now, and grow its multi-billion AWS business, taking Fast Company's #1 spot for Most Innovative Companies this year.<sup>1</sup>

With 560,000 connected assets in the field, **Caterpillar** is translating all that data into value-added, digitally-driven products for their customers in the areas of job site efficiencies, mine site safety, and equipment health management to name a few.<sup>2</sup>

Continuing its quest to automate farming, **John Deere** leverages an Intelligent Solutions Group that looks for digital solutions in the Internet of Things and Big Data.<sup>3</sup> Even before Tesla and Google, Deere has been working on autonomous tractors.<sup>4</sup>

A consistent presence on the Forbes list of Most Innovative Companies, **Salesforce** says they believe that "everyone can be a Trailblazer and we're building the technology to make it happen." With a projected 1.9 trillion transactions taking place on Salesforce in 2017 and a new strategic partnership with Google, they are on course to do just that.<sup>5</sup>



COMPANY ▲	DSI	YOY GROWTH %
ALASKA AIR GROUP	100	35.4
E*TRADE FINANCIAL CORP.	100	23.3
LULULEMON ATHLETICA	98	13.7
AMAZON COM	97	33.7
ALPHABET	97	21.9
ZILLOW GROUP	97	25.5
JOHN DEERE	96	25.6
COSTCO WHOLESALE	95	15.7
CHARLES SCHWAB	92	13.1
CATERPILLAR	91	24.6
SALESFORCE	84	25.0

<sup>1</sup> [fastcompany.com](http://fastcompany.com) <sup>2</sup> [businessinsider.com](http://businessinsider.com) <sup>3</sup> [networkworld.com](http://networkworld.com) <sup>4</sup> [theverge.com](http://theverge.com) <sup>5</sup> [secure2.sfdcstatic.com](http://secure2.sfdcstatic.com)

# HIGH EXPECTED GROWTH AND HIGH DSI

Companies expected to grow the most in the future, with a strong digital engine to help achieve those expectations

**Netflix** continues to be a digital disruptor. They report that users collectively watched 1 billion hours of content per week in 2017 on their platform.<sup>6</sup> They plan to keep investing heavily in content – up to \$8B in 2018.<sup>7</sup>

**Tesla** continues to innovate as the auto industry's best consumer digital experience. With the addition of their Powerwall battery and solar into an integrated Energy offering and with the recent launch of Tesla Semi, the company exemplifies innovation. Isobar goes back to 2009 with Tesla when we helped design the Model S prototype.

**iRobot's** strong growth within a growing market should bode well for a company whose digital share is 5x its revenue share.

**iRobot** commands 80% of the vacuum market and continues to reinvest in its products.<sup>8</sup> They recently unveiled new cloud-based technology as well as becoming integrated with

**Amazon's** Alexa voice-activated control.<sup>9</sup>

Coupled with increasing growth and a strong digital presence, online travel agencies like **Expedia** and **Priceline** rank among the highest in the DSI and continue to be formidable competition for companies within the Hotel and Airlines industries.<sup>10</sup>



COMPANY ▲	DSI	EXPECTATION FOR GROWTH %
NETFLIX	99	32.3
TRANSUNION	99	11.7
PAYPAL HOLDINGS	99	21.6
T ROWE PRICE GROUP	96	14.1
TD AMERITRADE	95	36.3
TESLA MOTORS	94	45.1
XCEL ENERGY	93	13.0
IROBOT	90	47.5
EXPEDIA	88	14.9
CHEVRON	81	13.2
ADOBE SYSTEM	83	21.4
PROGRESSIVE	82	18.4

<sup>6</sup> [techcrunch.com](http://techcrunch.com) <sup>7</sup> [theverge.com](http://theverge.com) <sup>8</sup> [fool.com](http://fool.com) <sup>9</sup> [fool.com](http://fool.com) <sup>10</sup> [digitalstrength.isobar.com](http://digitalstrength.isobar.com)

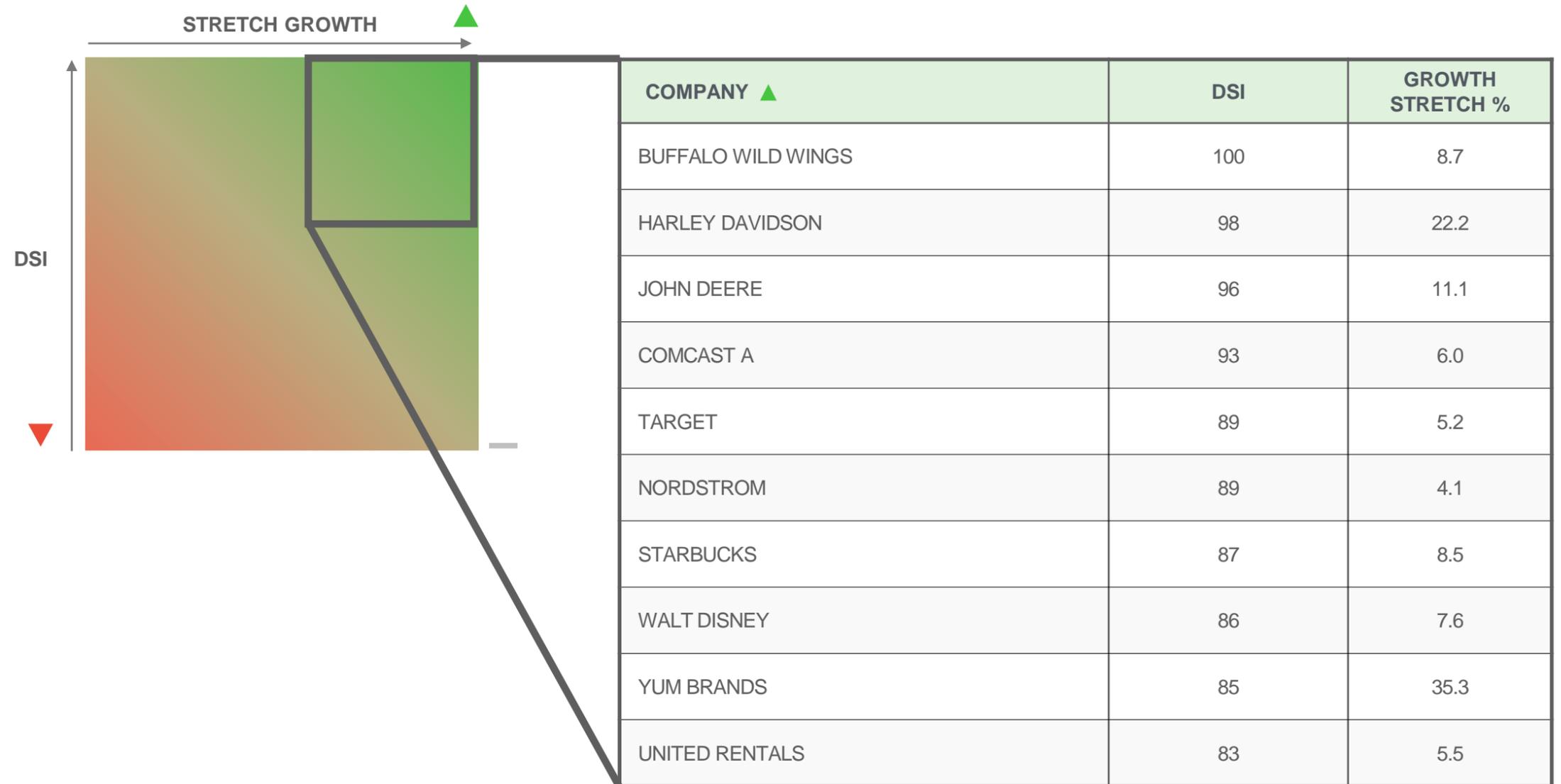
# HIGH STRETCH AND HIGH DSI

Companies for whom growth is expected to accelerate the most and strong DSI give good reason to believe in the transformation

Isobar is pleased to see **Yum Brands** on this list as we have been working with both **KFC** and **Pizza Hut** brands on their respective digital transformations.<sup>11</sup> Yum has invested heavily in the digital transformation of its KFC brand dating back to 2015. Isobar has been a part of various digital initiatives, including the highly successful launch of their 5,000<sup>th</sup> store in China.<sup>12</sup> Yum has reported they will spend \$130M to turn around Pizza Hut through 2018, and we have begun to embark on this journey with them.<sup>13</sup>

**Harley Davidson's** efforts to reach a wider audience through social and digital channels are reflected in their strong DSI score. Of note, they recently launched their 2018 product line with social influencers such as Jason Momoa.<sup>14</sup>

Within the struggling department store category, **Nordstrom** shows the most promise taking an aggressive approach with both its digital and business model strategies.<sup>15</sup>



<sup>11</sup> [kfc.com](http://kfc.com) <sup>12</sup> [youtube.com](http://youtube.com) <sup>13</sup> [www.cnbc.com](http://www.cnbc.com) <sup>14</sup> [adweek.com](http://adweek.com) <sup>15</sup> [digitalstrength.isobar.com](http://digitalstrength.isobar.com)

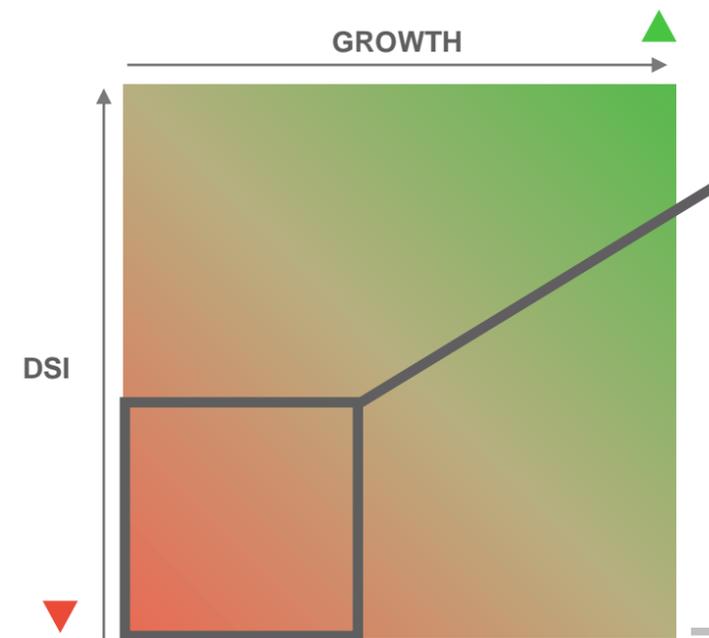
# DECLINING GROWTH AND LOW DSI

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

It's no surprise that we see a number of REITS on this list given the Real Estate industry showed limited growth overall and averages at a lower DSI. Three Utilities make the list – **Consolidated Edison**, **NRG Energy Inc.**, and **Southern Company**, representing a struggling industry's lowest performers based on combined growth and DSI.

Within Insurance, **Fidelity National**, **Amtrust Financial Services**, **Hartford Financial**, and **Assurant** showed negative growth and struggled to catch up to digitally-forward competitors such as **AIG** and **Progressive**.

**Hewlett Packard Enterprises**, which this year has seen the departure of CEO Meg Whitman<sup>16</sup>, shows limited growth as more corporate customers are moving digital operations to the cloud. This is evidenced by the continued dominance of the AWS platform as well as Microsoft's and Google's reported Cloud Infrastructure Services growth in Q3.<sup>17</sup>



COMPANY ▼	DSI	YOY GROWTH %
VORNADO REALTY TRUST REIT	1	-16.5
RR DONNELLEY AND SONS	1	-37.4
FIDELITY NATIONAL FINANCIAL	2	-6.2
JOHNSON CONTROLS INTERNATIONAL PLC	2	-20.2
AMTRUST FINANCIAL SERVICES	3	-2.1
HEWLETT PACKARD ENTERPRISE	5	-38.6
CONSOLIDATED EDISON	7	-6.0
NRG ENERGY	7	-24.6
SOUTHERN COMPANY	8	-1.0
HARTFORD FINANCIAL SERVICES GROUP	9	-0.2
ASSURANT	9	-13.5

<sup>16</sup> [www.nytimes.com](http://www.nytimes.com) <sup>17</sup> [itproportal.com](http://itproportal.com)

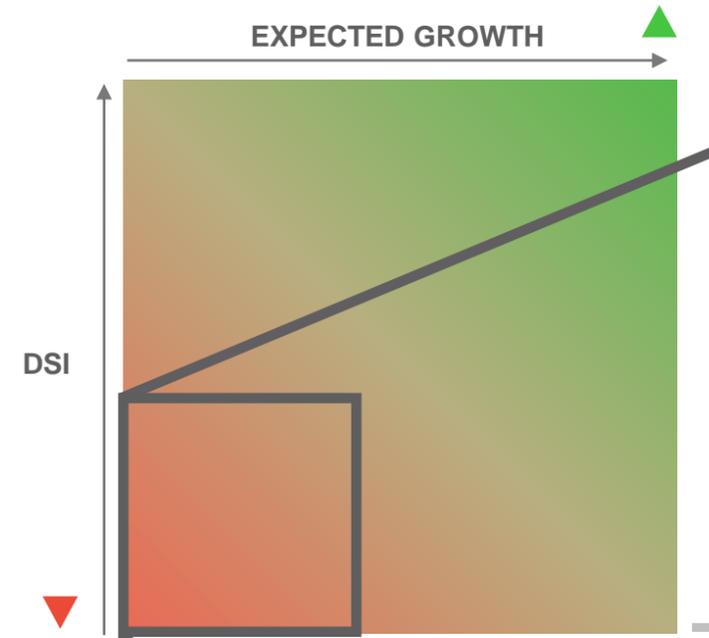
# LOW EXPECTED GROWTH AND LOW DSI

Companies that are expected to shrink the most in the future and lack digital strength to help turn the tide

Life and Health Insurance scores low digitally, projecting negative forward growth with **Aflac** having the lowest DSI score. Their CIO earlier this year stated, “Modernization for us is a long-range multi-year plan.”<sup>18</sup> The company might want to re-evaluate and expedite that plan.

**Pfizer** has one of the lowest DSI scores in its industry. This is partially due to the fact that its revenue share is so large, thereby dwarfing its digital footprint. To its credit, Pfizer has put a premium on digital initiatives, including, for example, migrating most of its 35 enterprise products to the cloud, developing an experimental Parkinson’s treatment with the help of the Internet of Things,<sup>19</sup> and leveraging data analytics and automation to help shorten the drug development cycle.<sup>20</sup>

**Conagra** struggles digitally, especially compared to companies like **General Mills** or **Kellogg**. As more consumers do grocery shopping online, CPG companies are learning how to adapt to technology that enables product delivery in under an hour.<sup>21</sup>



COMPANY ▼	DSI	EXPECTATION FOR GROWTH %
FLUOR CORP	1	-1.9
TRINITY INDUSTRIES	2	-5.1
L-3 COMMUNICATIONS HOLDINGS	2	-3.3
AON PLC	4	-14.5
TRANSOCEAN LTD	5	-33.8
MARATHON OIL	7	-12.0
TRUEBLUE	12	-9.2
PFIZER	13	0.7
AFLAC	14	-10.4
GILEAD SCIENCES	14	-22.7
VARIAN MEDICAL SYSTEMS	15	-16.1
CONAGRA FOODS	17	-1.3

<sup>18</sup> [searchcio.techtarget.com](http://searchcio.techtarget.com) <sup>19</sup> [www.altexsoft.com](http://www.altexsoft.com) <sup>20</sup> [blogs.cisco.com](http://blogs.cisco.com) <sup>21</sup> [foodengineeringmag.com](http://foodengineeringmag.com)

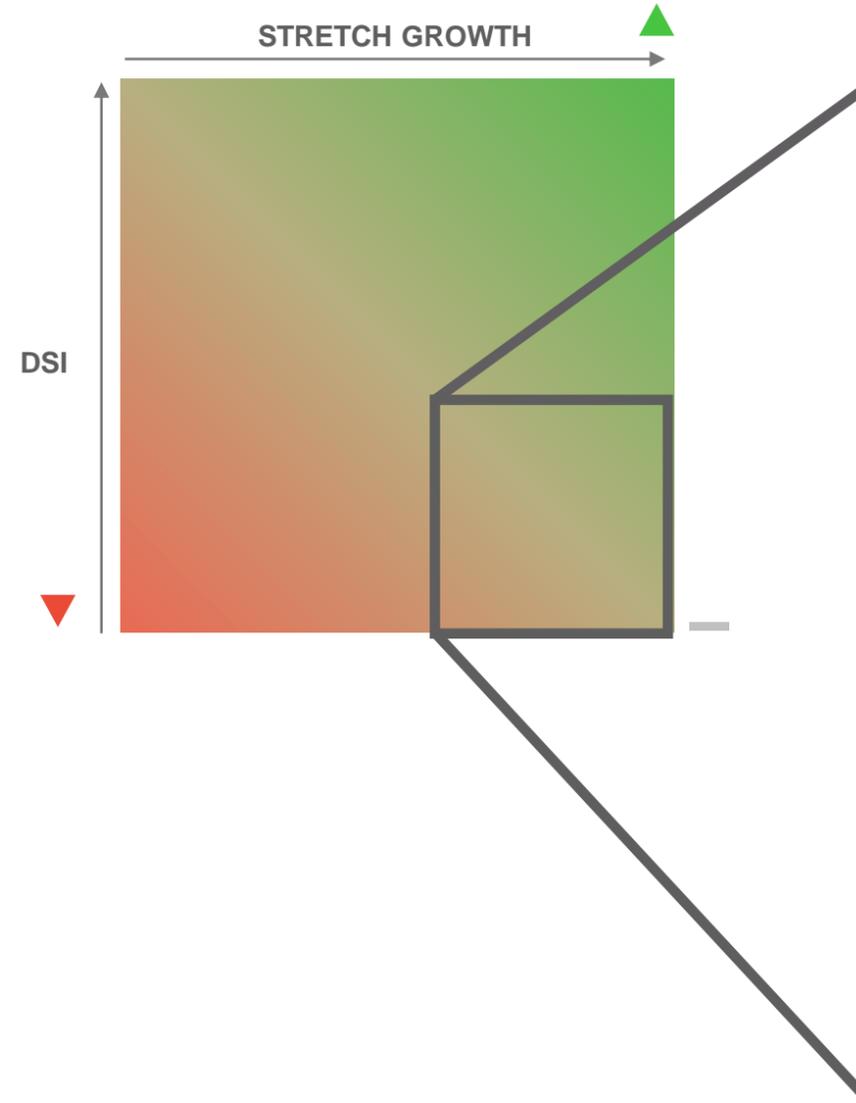
# HIGH STRETCH AND LOW DSI

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

Overall, Auto Parts and Automotive score low on the DSI, but Johnson Controls looks to rebound from last quarter and at least show small positive growth. Better late than never, the company has prioritized digital as one of its strategic “megatrends” they’re focusing on for the development of their business. If Johnson Controls can execute digitally, its possible the growth stretch will be justified.<sup>22</sup>

**Bank of New York Mellon’s** valuation is near all-time highs even though it scores lower overall on the DSI and also compared to its peers. New CEO Charles Scharf (former **Visa** CEO) helped turn Visa into a tech-savvy competitor, and is expected to boost BNY Mellon’s tech offerings and look for ways to generate faster revenue growth.<sup>23</sup>

**ManpowerGroup** scores at the bottom of the Professional Services category where it’s revenue share is 3x its digital share. A world leader in employment services, the company has been riding the tailwinds of strong labor and economic numbers. However, without a digital hedge the company could face headwinds if the economy takes a turn for the worse.



COMPANY	DSI	GROWTH STRETCH %
ARCHER DANIELS MIDLAND	2	9.1
JOHNSON CONTROLS INTERNATIONAL PLC	2	22.1
TENET HEALTHCARE CORP.	4	5.2
CLEAR CHANNEL OUTDOOR HOLDINGS INC	6	6.2
OPKO HEALTH INC	11	21.6
ROYAL GOLD INC.	11	13.0
BANK OF NEW YORK MELLON CORP	13	3.6
OCEANEERING INTERNATIONAL INC	14	3.1
MANPOWERGROUP	15	4.5
AUTONATION INC	22	3.7

<sup>22</sup> [blog.percolate.com](http://blog.percolate.com) <sup>23</sup> [www.bloomberg.com](http://www.bloomberg.com)



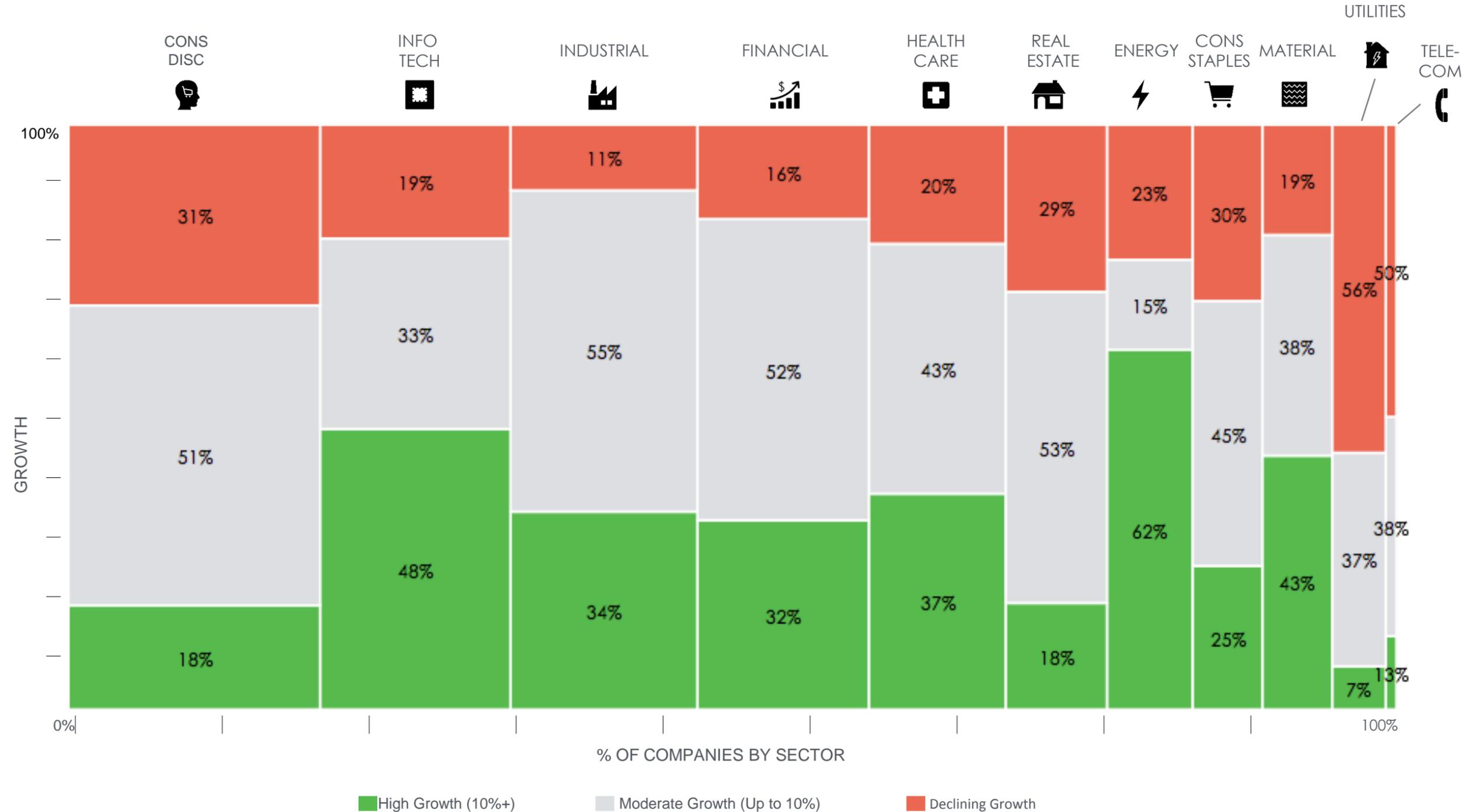
# MARKET LANDSCAPE

# NUMBER OF COMPANIES BY SECTOR AND GROWTH PROFILE

For these next four charts, the width of the columns are determined by the number of companies within the sector. For example, there are eight companies within Telecoms and 142 companies within Industrials.

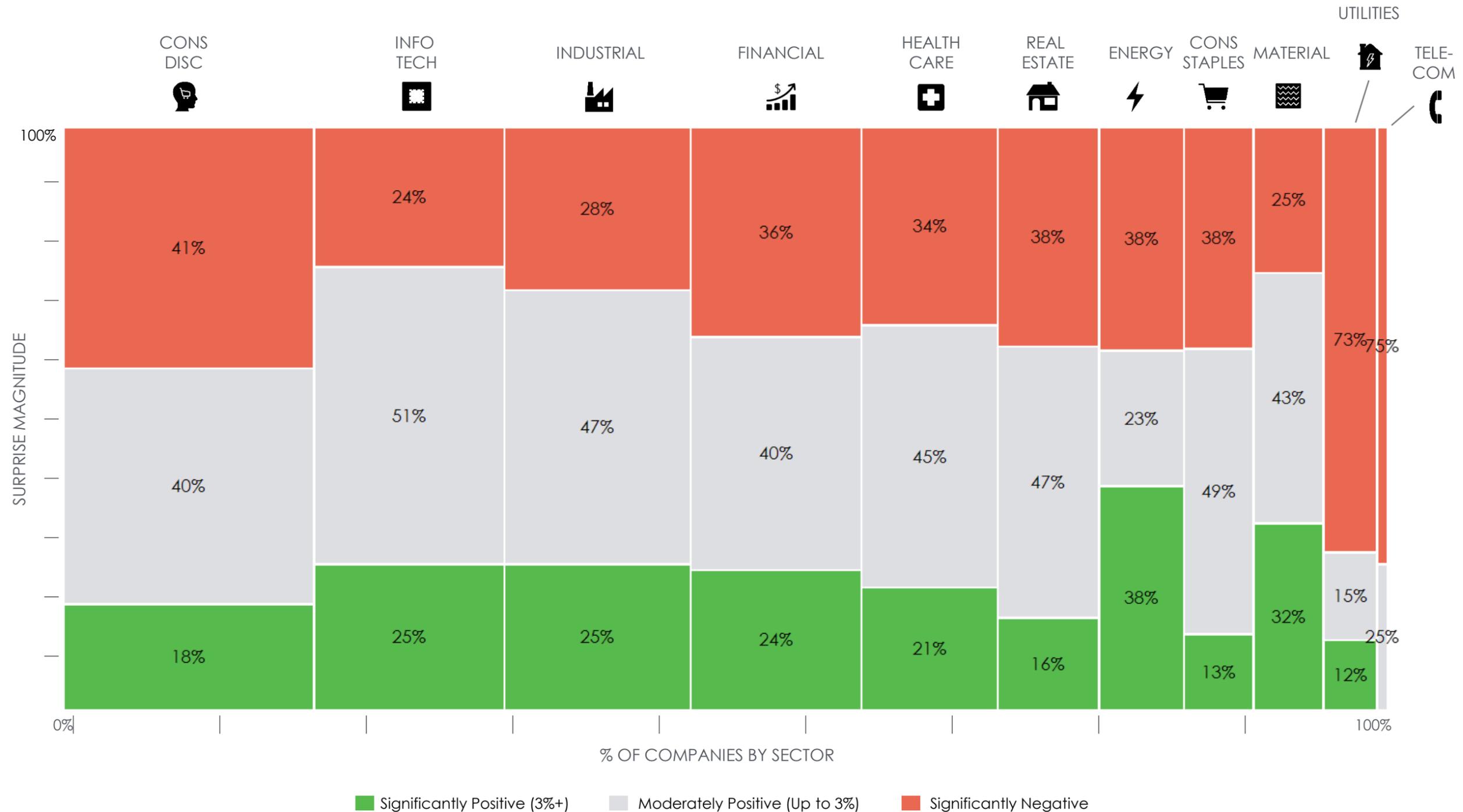
Energy is the big winner this quarter. Oil and gas companies are using digital to manage a long period of low prices, dramatically cut costs, and improve speed and decision-making. The most digitally transformed have a sustainable growth path and will reap from the inevitable up-cycle. Visionary oil and gas companies will embrace Internet of Things technology, the connected asset, the connected worker, robotics, and artificial intelligence.

Almost half of the information technology companies are doing well, responding to the digital imperative by transforming business models, service offerings, and global footprints.



# NUMBER OF COMPANIES BY SECTOR AND SURPRISE MAGNITUDE

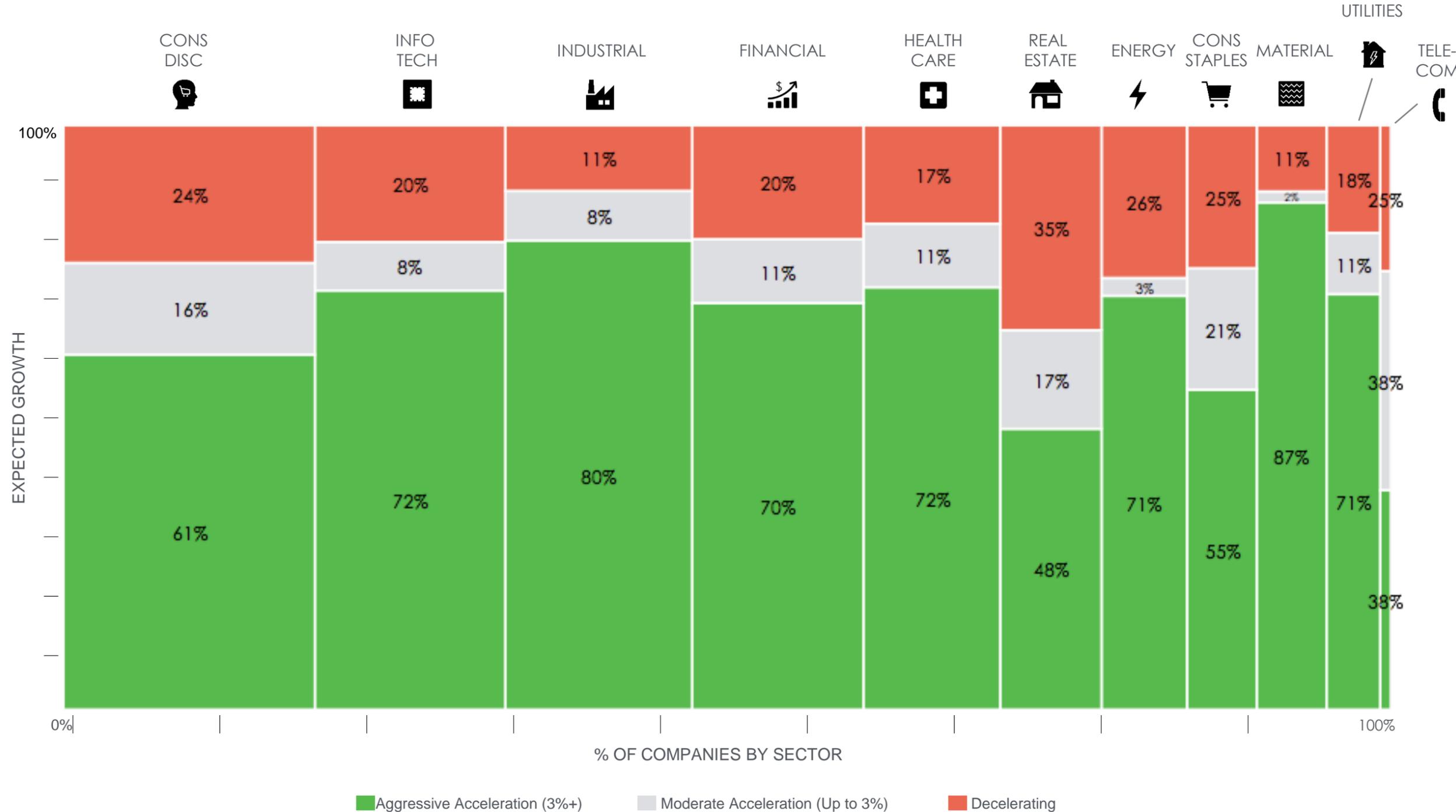
Utilities did not meet expectations this quarter. They've traditionally moved at a glacial pace, with expensive assets and regulation. The utility of the future will be a fully digital system of smart grids and meters, connected buildings, distributed generation, and mobile-enabled employees.



# NUMBER OF COMPANIES BY SECTOR AND EXPECTED GROWTH

The Materials sector includes commodity-oriented, non-energy companies such as mining and metals, chemical producers, and containers and packaging. This category tends to outperform during the latter portion of the economic cycle. If U.S. infrastructure spending picks up, as promised in the recent election, Materials will benefit. Within the DSI, both steel and aluminum companies are the standouts.

As the economy continues to plow ahead, Industrial industries such as Airlines, Machinery, and Construction should continue to do well. However, outside of Airlines, the sector as a whole is below average in the DSI, putting them at greater risk if the economy starts to falter.

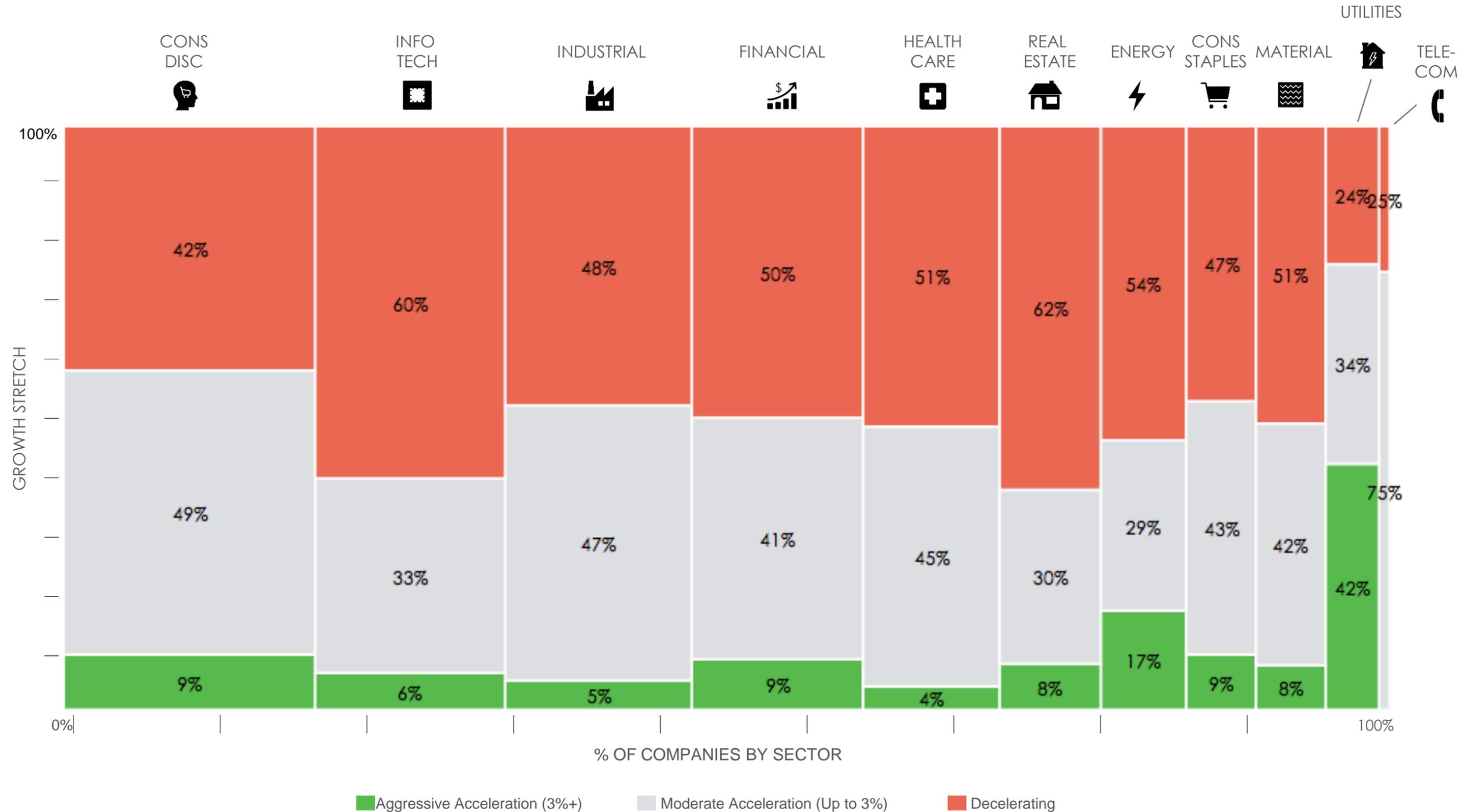


# NUMBER OF COMPANIES BY SECTOR AND GROWTH STRETCH

Utilities look to accelerate in the next three months and recover from last quarter's negative results while the rest of the sectors show conservative growth stretch.

However, if/when President Trump's tax plan passes, look for growth stretch to increase across all sectors as big business is the main beneficiary with the corporate rate dropping from 35% to 21%. Wall St. strategists say the proposed tax bills could boost aggregate S&P 500 earnings anywhere from 5 to 9.5 percentage points next year.<sup>24</sup> Telcos, Financials, and Consumer Discretionary look to benefit the most while technology companies will benefit the least.

The biggest winners within Financials will be Banks, and within Consumer Discretionary, Retailers.<sup>25</sup>



<sup>22</sup> [www.cnbc.com](http://www.cnbc.com) <sup>23</sup> [www.reuters.com](http://www.reuters.com)

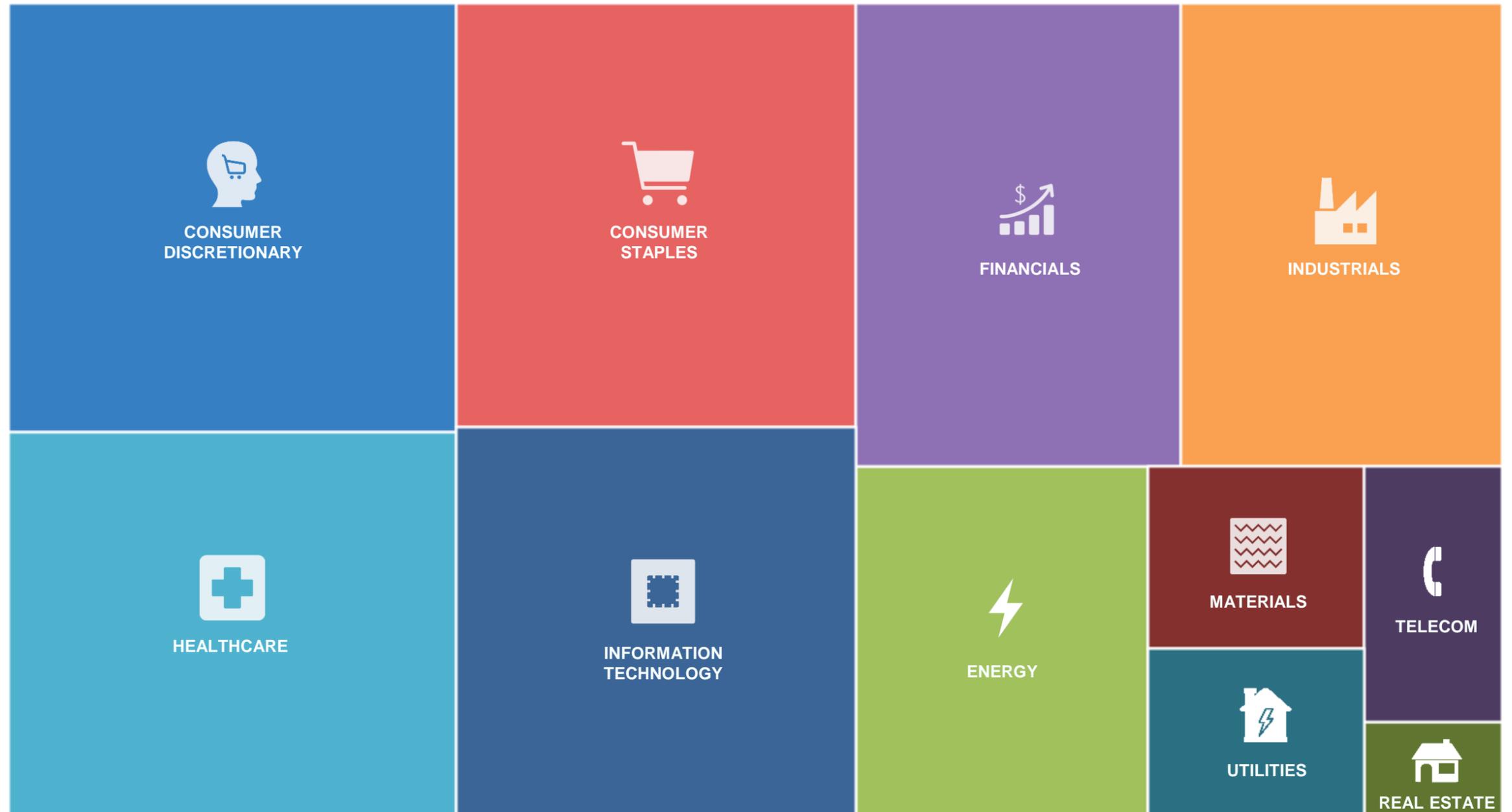
# SECTOR REVENUE

The industries of Specialty Retail (\$132M), Media (\$96M), and Automobiles (\$73M) account for a high percentage of Consumer Discretionary.

Health Care and Provider Services account for 68% (\$314M) of Health Care, with Pharmaceuticals accounting for 15% (\$73M).

Consumer Staples is dominated by the Food and Staples Retailing (\$293M) industries which include companies like **Costco** and **Walmart**.

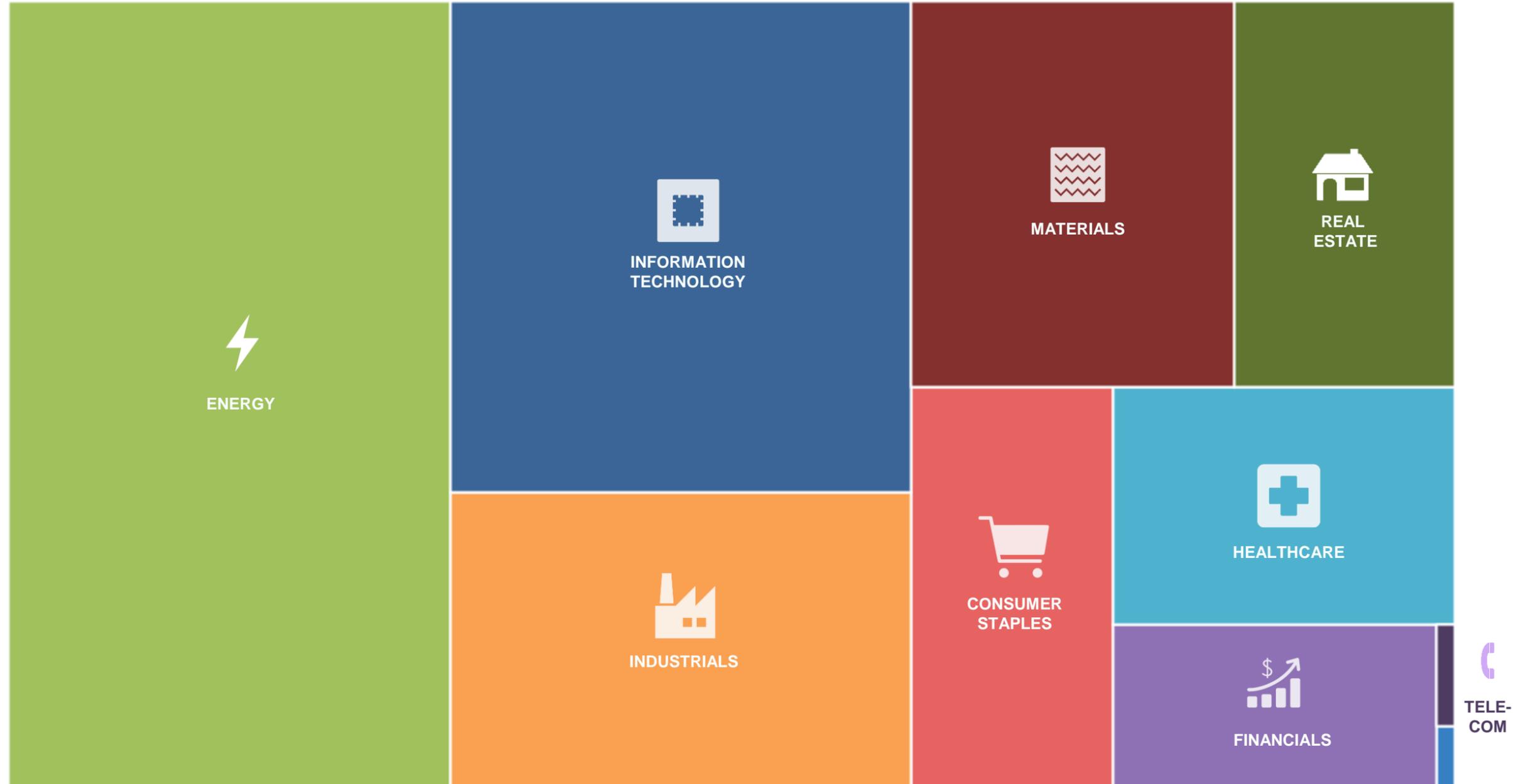
The three industry leaders in IT are Technology Hardware Storage and Peripherals (\$82M), IT Services (\$74M), and Internet and Direct Marketing (\$55M).



# SECTOR REVENUE GROWTH

Last quarter, Energy outperformed all sectors growing 18.4% with \$42.4B in revenues as the entire industry looks to rebound off of poor previous performances. **Exxon Mobil** and **Chevron** lead the charge, both of which also place in the upper quartile of the Digital Strength Index.

Consumer Discretionary posted a lackluster 6% growth in revenues. This sector has been dragged down by the Automobiles industry, the main culprit being **General Motors** and also Auto Components where **Johnson Controls** has underperformed. Surprisingly, Specialty Retail kept growth positive with help from Home Improvement companies, **Home Depot** and **Lowe's**.



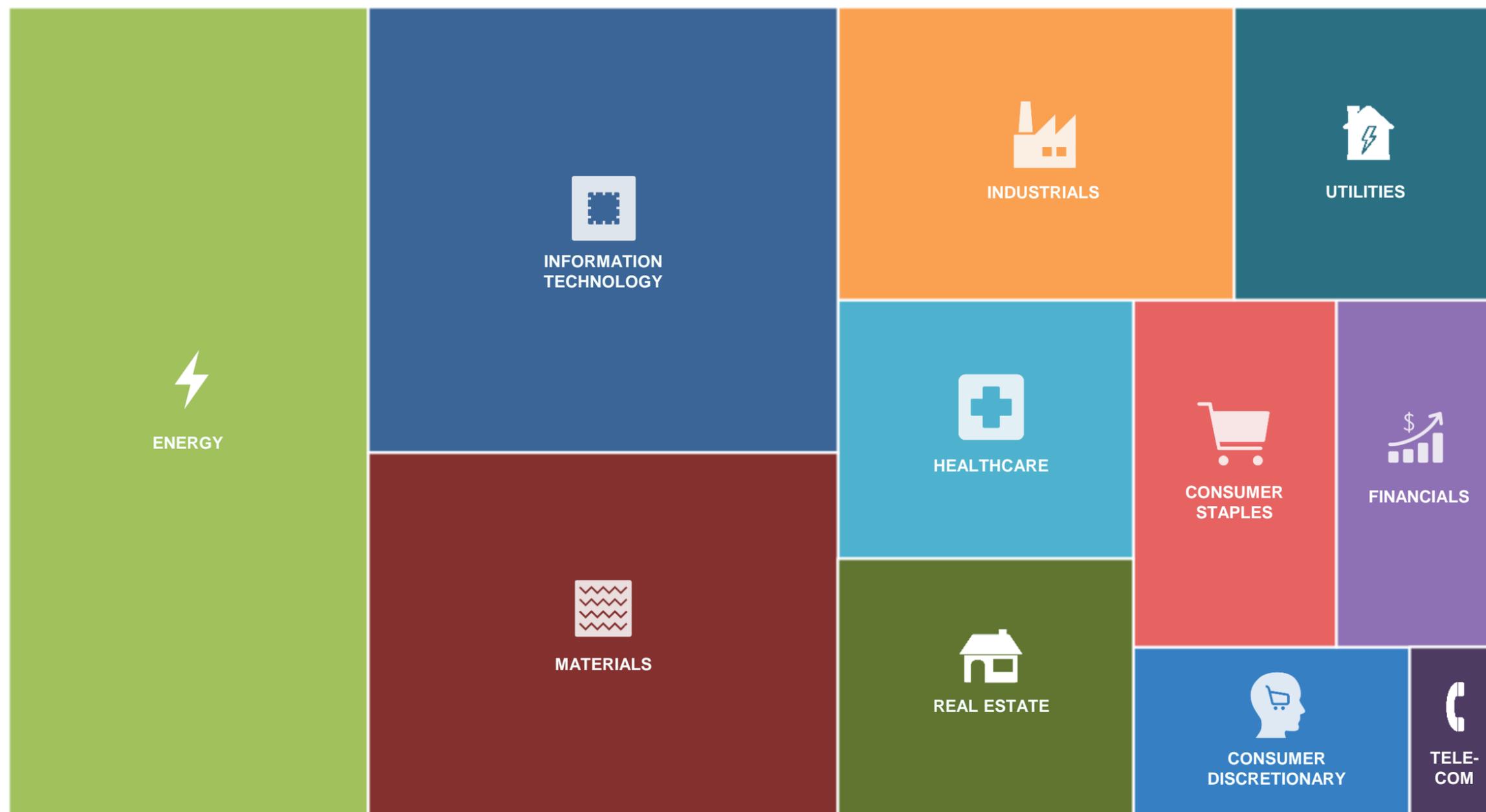
 CONSUMER DISCRETIONARY

# EXPECTED SECTOR REVENUE GROWTH

Energy looks to continue its revenue growth momentum, as do IT and Materials.

Within IT, the Internet and Directing Marketing industry shows the highest expectation for growth as **Amazon** continues its world domination. **Alibaba** also shows promise, albeit 3x lower than **Amazon**.

Interestingly, the Chemicals and the Metals and Mining industries within the Materials industry expect decent growth. **Sherwin Williams** leads in Chemicals while **Nucor Corporation** leads in Metals and Mining.

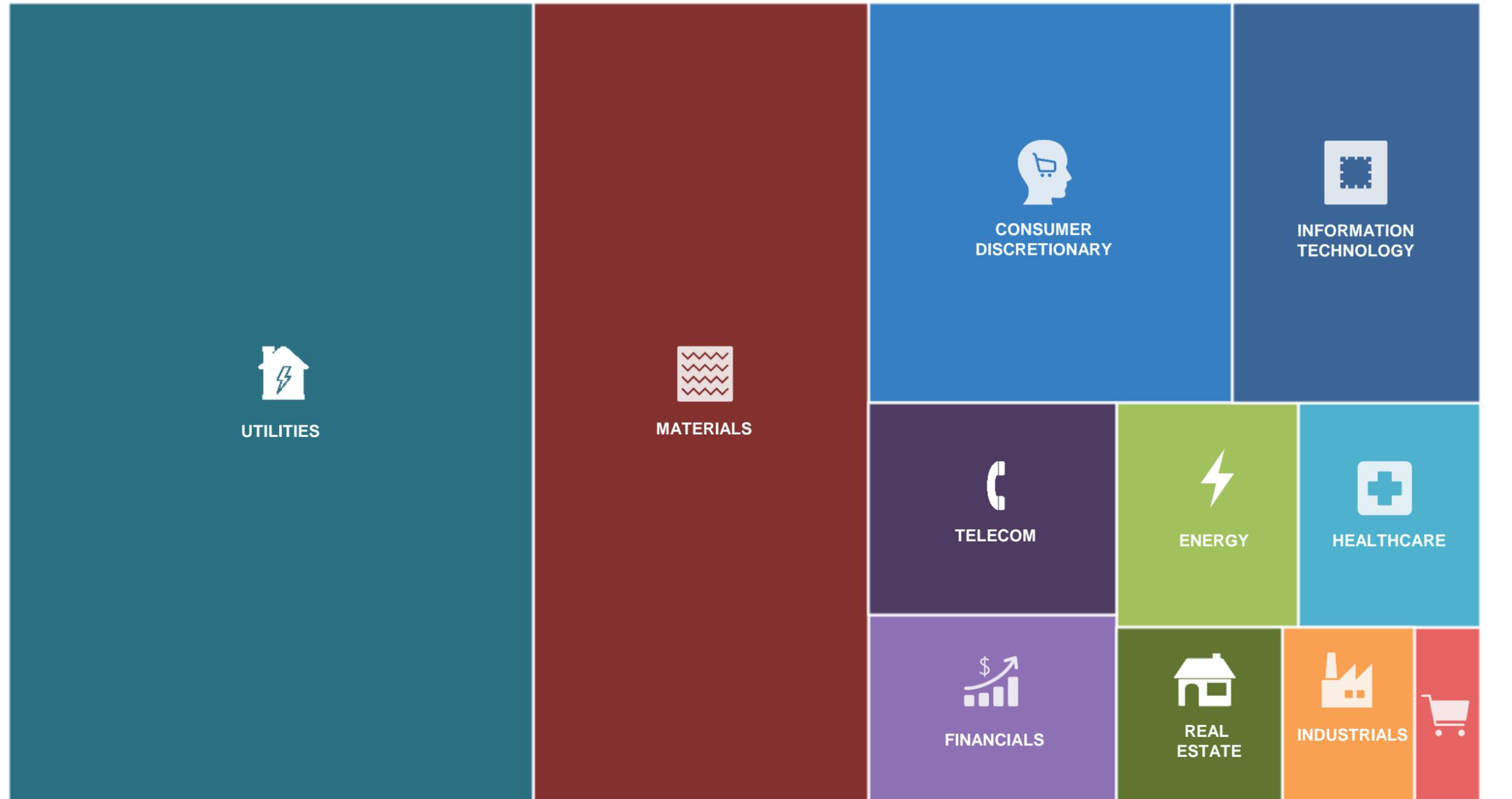


# SECTOR GROWTH STRETCH

For the Index in general, the expected growth for next quarter should be close to the same as last quarter.

Utilities is the sector expecting a significant improvement. However, the industry is looking to rebound from last quarter's -2.2% growth to a predicted 5.1% growth for next quarter.

Materials looks to parlay last month's growth, hoping to add 4.6% for next quarter. Most of this is due to aluminum company Alcoa predicting much better Q4 numbers than their disappointing Q3 results.



CONSUMER STAPLES



**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.

# CONTRIBUTORS



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CO-FOUNDER, ALPHA-DNA

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.



*Rod Fertig*

CO-FOUNDER, ALPHA-DNA

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.



*Tonya Bakritz*

VICE PRESIDENT, ISOBAR US

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 & 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.



*Bryce Tolman*

THOUGHT LEADERSHIP MANAGER, ISOBAR

Bryce is the Thought Leadership Manager at Isobar. He has 15+ years in the public and private markets. Previously an equity derivatives trader, Bryce has shifted his focus to financial research and data analysis. He is passionate about finding value in obscure places or where others might not be looking. Bryce has an MBA in Finance and Entrepreneurship from the University of Chicago Booth School of Business, and a BA in International Studies from the University of Washington.

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