

# Data-Driven Thematic Opportunities

Artisan Partners Thematic Team

## Q: How does your team develop a theme?

Our thematic approach is a disciplined framework for idea generation. We're looking for inflection points in industries—whether they're secular, cyclical or structural—because we believe inflection points allow us to have a divergent view on an industry's long-term return on capital, which is what we need to deliver alpha.

When we identify a potential inflection point, we build an industry model so we can understand what is driving that inflection point—whether it's units, price, margins, etc.—and the change that driver could have on the entire industry's return profile. We then try to quantify the potential differentiation from that driver, along with the change in the return on capital of the industry to forecast whether we can profit from having both earnings upside and multiple expansion for the industry.

## Q: How does your thematic work translate into stock selection and portfolio construction?

Our industry work is underpinned by the detailed, fundamental bottom-up models we build on all our investments—consistent across every industry. We forecast the earnings power and the ROIC for each company on a five-year forward basis. We establish an expected outcome for each company that's based on a discounted cash flow analysis and our estimates of the forward ROIC and ROIC. We also quantify the earnings power differentiation potential based on our thematic work. We use this target and the differentiation to size holdings and optimize the portfolio. Our aim is to continuously seek the best risk-adjusted returns while eliminating subjectivity from our process.

To recap, we start at the theme level. We do rigorous, bottom-up research on each company we invest in. And then we optimize the portfolio to naturally reflect our process and to help maintain objectivity around our research.

## Q: Where are some areas you are finding thematic inflection now?

A key area of inflection we are seeing is data and the growing role it plays in society and across various sectors. Low-cost sensors, along with cheaper and faster computing resources, are enabling the connectivity of the real world in a paradigm shift to what is called the Internet of things, or the IoT.

We've gone from smartphones and smart TVs to smart factories, smart health, smart cars and smart homes—connectivity has become deeply ingrained in our society. And with that connectivity comes still more data—we're just scratching the surface on the scale of what data generation will be. Data creation in general is already doubling every two years, and it's estimated machine data will grow 50 times over the next five years.

## Q: What investment opportunities are you finding based on the growth of data?

We're focused on companies providing the core infrastructure to individuals and enterprises to better capture, analyze and derive insights through their data.

From an investment perspective, there's three buckets where we think we can find differentiation. We're looking into companies providing core infrastructure that enables connectivity and storage. We're interested in enterprise beneficiaries that are exposed to the growth of new IoT devices. And we're looking at software and applications that provide the data analytics to enable real-time decision-making.



**Christopher Smith**  
Portfolio Manager

**16** Years Investment  
Experience



As it relates to infrastructure, the 5G network is estimated to accelerate the IoT by providing a 10-times boost in speed and reliability of wireless networks. This means data stored in data centers should nearly quintuple by 2021 globally, and it's expected to stimulate over \$1 trillion of economic activity.

As for enterprise beneficiaries, we are cognizant that while there are approximately 1.5 billion PC users and 7 billion smartphone users, there may be over 100 billion IoT devices. And the data stored on them could be five times higher than that of today.

And as for software and applications, the digitization of the enterprise is a driving force for tech budgets right now. CIOs are prioritizing spend to better understand their data and enable real-time decision-making to drive business agility and cost optimization. We believe we'll continue to see a large inflection in software spend to process this information.



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