



PERSPECTIVES

How Technology Has Set Industries on a Journey of Opportunity

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admin

Technology is transforming nearly every industry, from health care to retail to transportation. Franklin Templeton Investments recently hosted an event examining the race to develop and market autonomous vehicles entitled, “Along for the Ride: Evaluating the Impacts of Self-Driving Cars.” Panelists at the event examined the progress made so far, and the implications of a world of truly autonomous vehicles. Franklin Equity Group’s portfolio managers; James Cross, Robert Rendler and Robert Stevenson, and Aleck Beach, vice president and research analyst, Franklin Templeton Fixed Income Group, took part in the event share their insights.



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Rapid advancements in technology such as self-driving cars have the potential over time to change the way we live, work and travel. This evolution is unlocking a myriad of new investment opportunities that we couldn’t even imagine just a couple decades ago—and in companies not traditionally considered part of the technology sector.

Of course “technology” is a broad term. When we consider advancements in technology, we consider three distinct categories: consumer technology (such as mobile handsets), enterprise technology (aimed at companies rather than individuals, for example cloud computing) and industrial technology (including factory automation).

Beyond the automotive industry, which is considered Consumer Discretionary, recent developments in technology have placed the broader transportation industry under the Industrial sector at the start of a multi-decade period of change and opportunity. As transportation is at the forefront of the shift, it’s an area that is undergoing a dramatic overhaul across a variety of fronts, and offers a significant area of investment opportunity for a variety of reasons.

As we consider new technologies, we're always interested in opportunities that present a dual-use case, both government and commercial.

For most of the early applications in industrial technology, we have found that governments typically make up a large proportion of the customer base and tend to be involved early in the process. The internet, satellite communication, GPS, fiber optics—even commercial flight—all had early government involvement.

While catalysts such as mobility, cloud computing, artificial intelligence and machine learning have brought about fundamental changes in the consumer and enterprise sectors, incumbents in industrial segments such as aerospace, transportation and defense are only now beginning to ask how those technologies could impact their businesses.

Identifying the Digital Gap

It is a bit easier to see the case with the automotive industry. We see there still is a “digital gap” in many industries, although there is evidence it is starting to narrow.

We think many established incumbents have fantastic global franchises, but as they survey the advance of emerging technologies, they likely see two issues.

First, they need to play defense to avoid disintermediation. Second, they need to enable the transformation of their business models to participate in new product and service offerings, grow market share and move into higher margin, free cash-flow opportunities.

To overcome these two issues, we think the auto world in general needs to think about partnering with the tech world more than it has in the past.

There is evidence that is happening. At a recent research event we hosted at our San Mateo, California, headquarters, the Bay Area-based technical director at the Research and Innovation Center of one of the world's largest automobile manufacturers told us the language gap between Silicon Valley and the automotive industry has shrunk.

He described his role as identifying and absorbing technology into the automotive industry.

“We're no longer thinking about Silicon Valley vs the automotive industry, now it's Silicon Valley AND the automotive industry,” he explained.

Cooperation for Electrification

The electrification of vehicles is one area of potential cooperation.

Tightening regulations on vehicle emissions around the world have acted as a catalyst for the wider adoption of electric vehicles.

Europe and China are looking at mandating 20%–30% improvements in carbon dioxide emissions by 2020/21. Cities such as London and Paris have indicated an intention to ban the internal combustion engine by 2040.

From our perspective, there may be little sense for original equipment manufacturers (OEMs) to pump billions of investment dollars into internal combustion engines. We're looking at a world of potentially simpler, lower maintenance, lower-cost electric powertrains.

Investment Drive

On the other hand, electrification and building battery packs for vehicles have not traditionally been a priority for automobile OEMs. However, we think these developments could force some players to make more investments in this area.

In our eyes, they have three options:

- Build their own new tech in-house. Most OEMs have large research and development budgets, large staff

and large laboratories. We've seen evidence that many are going down this route.

- Buy new technologies from enterprise vendors or software providers.
- Partner with emerging technology companies coming out of innovation hubs like Silicon Valley.

Increasingly, we think the third path—partnering with tech companies—will be attractive for large, established OEMs as they seek out the ingredients they need to offset disruption and enable a transformation of their own businesses.

Over time, vehicle powertrains will likely migrate away from internal combustion to electric powertrains; and as ride hailing and eventually autonomous ride hailing further penetrate the transportation ecosystem, traditional vehicle features such as power and handling may lose customer mindshare. So instead of developing the next great proprietary V8 engine for a pickup truck or performance vehicle, perhaps automobile manufacturers should redirect investment spending towards supporting their brand inside the vehicle, through the human-machine interface, or developing new revenue streams such as supplying and managing ride-hailing vehicle fleets.

Meanwhile, it seems to us the technological revolution underpinning the progress toward electric and even autonomous vehicles has brought down barriers to entry. And, it has allowed new players to participate in the automobiles industry.

We've seen big-name technology companies investing in this arena. And we're seeing semiconductor companies seeking to provide the intelligence that's a crucial part of the evolution of transportation.

These developments broaden the competitive landscape with new entrants. But as we look at the race for fully autonomous automobiles, the question of who will get there first—and more importantly who figures out how to commercialize and monetize this technology once they do get there—is still pretty wide open.

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