Connected cars: IoT’s value proposition

James Nolan - November 29, 2016

As with most enterprise technologies, the adoption and rollout of IoT is probably a little slower than the hype cycle of a few years ago would have led us to believe. As with any potentially revolutionary technology, IoT has gotten off to a slower start because businesses have struggled to determine its value proposition. Businesses invest in technologies for two primary reasons: to generate revenue or to reduce costs. Just as with computers in the 1970s, mobile handsets in the early 1990s, and software-as-a-service in the 2000s, businesses in 2016 and beyond will be shouldering the burden of the investment and development of IoT. Businesses want to ensure that IoT can live up to the promise of revenue generation and cost cutting that has been so heavily promised over the past few years.

These are difficult issues to address in most areas of IoT, but we will get there, just as we did with all the other technologies I have mentioned. One area where the value proposition is relatively obvious and has had much attention focused on is the automotive industry and connected cars. There, whether it’s shared assets, driverless trucks, logistics, etc., the possibilities are endless, and the cost savings and returns more measurable. What makes this area even more valuable is its direct connection to the end consumer.

We’ve previously spoken on how specific areas like trucking have obvious ROI triggers that can drive adoption. But in connected cars, the service delivery is orchestrated around a person and that person’s data, which can have value beyond the immediate automotive application, including shopping offers or personalized car insurance. So now, connected car data begins to look significant enough that companies are willing to make more speculative investments ahead of the near term revenues. Another reason that this is a lucrative area is due to inefficiencies involved in our current transportation based infrastructure. Massive amounts of land are devoted to roads, street parking, and parking lots—in Houston alone, almost 25 percent of downtown land is devoted to street and garage parking.

My company recently published a white paper on the implications of data exchange in the connected car space. Currently, the numbers appear relatively small—GM’s OnStar system gave them an early lead, but even a colossus like Toyota has roughly 5,000 connected cars today. One reason for the slow approach could be that the automakers are unwilling to adopt a strategy that would speed adoption, but hand the data and the value derived from that data over to somebody else. Another potential reason for the delayed adoption may be the need for integrated data platforms that would aggregate all of the data and make it usable—what the white paper calls a data orchestration platform. Such an orchestration platform would include APIs and adaptors to enable easy integration of third-party systems and would facilitate the development of various applications based on the available data.

Beyond technical and implementation aspects, other obstacles to overcome are of a business nature. For example, ownership and privacy of the data; how would that data be anonymized, shared, and
monetized? The white paper posits companies participating in data exchanges based on agreements where data contributors (e.g. car companies) define their required compensation with metering, partner interfaces, security mechanisms, and even tiered access to services; bronze, silver, and gold packages. All of it is tough to navigate and potentially regulate, but the payoffs could be immense.

Self-driving vehicles will clean-up asset inefficiencies. The insurance industry can be overhauled as responsibility shifts from drivers to owners or manufacturers, who provide individual transportation as a service. Usage-based plans for everything from actual transportation to insurance coverage can replace current thinking creating opportunities for new companies in many similar industries. Remember: Apple didn’t ship mobile handsets before 2007, but it didn’t take them long to become a major player after that.

Also see:

- The connected car as a platform
- The promise of the connected car
- IoT has not yet lived up to the hype
- Driverless trucks: ROI triggers in IoT adoption