The tech refugees bringing Tesla software chops to every car

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It's about the software, silly. For all of Tesla's battery wizardry, the company's equally impressive coup has been creating a vehicle that can be updated and improved from afar as easily as a smartphone. And while

other automakers are finally making long-range electric vehicles, Tesla has a considerable head start in crafting a computer-like car.

Sibros Technologies Inc., a startup packed with talent from Tesla and Uber, is trying to change that. The two-year-old company is selling a system that it says can turn any vehicle into a network of firmware and software, all tightly linked to the cloud—critical updates download to the machine while valuable data moves onto Sibros servers. The market: the tens of millions of passenger vehicles sold every year that aren't made by Elon Musk.

We caught up with CEO and co-founder Hemant Sikaria to talk about traditional carmakers' struggles with software and what the connected vehicle will look like five years from now.

Where did the idea for the company come from?

In our family, we actually have five vehicles from one manufacturer—two different models. All five were recalled for a software issue. I thought, 'This is ridiculous.' This was back in early 2018. I was starting to think about what to do in the auto space.

Your issue wasn't an anomaly?

I did a lot of research and realized most automakers have a lot of marketing around [software], but nobody is really able to actually do it right. There are a few OEMs, for sure, that can do software updates on a handful of controllers in their vehicle—maybe 4 or 5 controllers out of 50 or 60. Is the air-conditioning on or off? Are the windows open? Are the lights on? Those kinds of simple things can be tracked. It's very rudimentary.

Why the lag?

The reason it's so difficult is it's not the same as operating your phone, where there's one chip and one operating system. You have different operating systems, different vehicle networks. It becomes very complex. We are talking to a very significant number of [automakers] across the globe. Most of them can collect maybe 50 parameters from the vehicle, though a typical vehicle has 4,000 to 5,000 parameters.

Would it be fair to say you are trying to build a Tesla-like software system for non-Teslas?

Yes and no. Whatever was built at Tesla was built for Tesla vehicles, which have a very specific architecture and design. The automakers we are talking to have different vehicle architectures—we need to be able to support that in a generic way. We don't want to have to do one-off consulting work to support each vehicle. There are two fundamental building blocks that need to be in place: getting software updates and diagnostic commands down the vehicle and getting meaningful data out of the vehicle and up to the cloud.

So how many vehicles do you have in the wild, so to speak?

We currently have about half a million vehicles that are using our platform. And we're working with about a dozen automakers that create everything from bikes, motorbikes and scooters, to luxury vehicles.

Is it an easy sell?

When we first talk to an OEM, they'll say, 'Hey, we have software updates figured out; we have a supplier we're working with. But we have a real gap on the data collection side.' When we do a deal with them, we show them the data collection, but we also show them the software updates. Typically, after that they'll say, 'We didn't realize how far behind we were.'

What's your revenue model?

Most automakers still treat software like hardware. As we go through the procurement process they want to see an up front, fully-baked cost for each vehicle. We give them one price that includes support, integration and everything for that vehicle. The customer pays us up front for 5 years, so we don't have a cash-flow issue. Pricing is very tricky too, because we have to price it below what they perceive they can build it for internally. Even for us to build the platform, it's going to take two years to have it fully fleshed out.

Part of the challenge, then, is automakers trying to build this in-house.

The typical large automaker has hundreds of people working on [over-the-air programming] or data collection and they've been working on it for years. The hardware, the mechanical engineering and the software engineering, all belong to one leader, so each company has 50 leaders. Then there are mini silos. All of that is under product development and the cloud is under the IT department. With all those silos and in these big companies you can literally get lost in the sea of people.

What's the competition?

The biggest threat is still these suppliers. Harman and Bosch are the big ones. They have bigger pockets and pre-existing relationships with the automakers.

Where will you be in three years?

Where we think we are and where the industry is, it's like 2008 and the iPhone launch. Steve Jobs made this amazing product, but I'm sure he couldn't foresee several billion-dollar companies built on top of his platform. In the automotive industry, we feel like we are that iPhone.

We are collecting the data, doing all the diagnostics that will enable a lot of other applications in the future, whether we create them or we work with partners to create them. We want to be on 100 million vehicles in the next four years and we want to grow beyond the auto industry—it could be a drone, it could be mining equipment, it could be industrial robots. The most complex use-case of all is the luxury sedan. Once we solve that, we're fairly confident we can drop in to a number of other industries.