
At Last, a New Business Model for Tesla

By [Karan Girotra](#)

Two weeks back, Tesla Motors, the company behind the Tesla Model S, arguably the most promising all-electric challenger to the century-long domination of fossil-fuel cars, announced an innovative switching station based infrastructure that would bring its flagship product one step closer to being the first all-electric no-compromises luxury sedan.

We were delighted to hear of this latest move by Tesla. Almost four months back, on this blog, we called for Tesla to complement the path-breaking technology in the Model S sedan with an innovative business model to match ([Tesla's Model S: Technology Outruns the Business Model](#)). The [proposed battery-swap system](#) will allow a driver to replace a depleted battery with a fully charged battery in less than 90 seconds — faster than filling up a tank of gas — giving electric vehicles the almost unlimited range of fossil fuel vehicles.

Pioneered by the now bankrupt electric vehicle company, Better Place, the switching station concept is a kind of insurance policy: if and when the motorist runs out of charge the car company promises to provide him with a fully charged battery. Typically, the motorist must pay to avail of this offer. The car company covers the motorists range risk by building these switching stations.

As some of our [analysis and research](#) on these switching station models has shown, like many other risks, it turns out customers overestimate the risks of running out of battery — and a provider company that pools this risk across many customers can afford to insure it for a significantly lower cost than the individual motorist perceives will benefit from offering the service. Thus, switching stations can be a win-win, motorists are relieved of their

range anxiety and the car company can get many more motorists to sign up.

The use of switching stations by Tesla also highlights two truths that we have repeatedly encountered in our study of hundreds of business model innovations (we document these in our forthcoming book “The Risk Driven Business Model: Four Questions that will Define your Company”, Harvard Business Press, 2014). First, we often see that groundbreaking technology rarely achieves mass adoption without a corresponding innovation in the business model around the sale/use of the technology.

Second, a new business model can often make the ownership and use of existing products/technology more environmentally and socially favorable. To begin with, business models that align incentives of users with the environmental impact of their use can make existing products and technologies more sustainable. What’s more, as previous disruptive technological advances like the Internet show, new technologies often offer greater potential than existing business models can realize with them.

Specifically, the innovative technology offerings of some green technology firms often come with economic characteristics (scale-cost functions, risk profiles, cash flow profiles, etc.) that are drastically different from the traditional technologies that they substitute. Thus, to realize the technologies’ full potential, these firms must pair their innovative technology offerings with business models that facilitate commercialization, adoption, and scaling of these innovative technologies — Tesla’s adoption of the switching station framework being a case in point.

We believe these patterns extend far beyond Tesla — there are numerous innovative technologies that are waiting for an innovative business model that will facilitate their use and adoption, and there are numerous business model innovations that can make everyday activities more sustainable. We hope that some of our readers will follow the lead taken by Tesla and help change the world, one business model at a time.

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