Companies Sharing Engineering Resources Across the Globe

Curious Cat Science and Engineering Blog

Swapping batteries for diesel engines [1]
Car companies, like aircraft manufacturers, are sharing engineering skills across borders to speed up and cut the costs of technological development. It happened with Boeing's 787 Dreamliner. The American aircraft maker outsourced some of the engineering to Japanese suppliers, admitting that it does not have all the necessary expertise. Likewise, Toyota has agreed to work on hybrid trucks with Ford, and electric vehicles with Tesla, the Silicon Valley sports-car maker. BMW is working on improving the current generation of lithium-ion batteries with France's Peugeot Citroën. Nissan, as well as joining forces with Renault, has joint projects with Daimler.

There are many reasons to pursue such efforts (as well as drawbacks). My belief is companies would rather not take on the complications of such partnerships but the advantages overcome those desires. The high cost of research into these efforts is a big part of what pushes such collaboration. Also once a company has success they often can build up quite an advantage. The costs of trying to engineer a different solution (that doesn't violate someone's patents) often makes buying that technology or partnering attractive.

I really like this webcast, from 2008, on Toyota's engineering development program [2].

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