

How automakers can get the most value from Silicon Valley

How can automotive manufacturers increase their Silicon Valley offices' impact while preserving the distinctive cultures that are essential to their functioning? Communications and understanding differences are key.

by Sven Beiker

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What sells a car? For the better part of a century, it has been a fusion of engineering and emotion. The car's mechanical performance: how fast it could go, how smooth it rode, how much it could carry, or (especially more recently) how little fuel it used—all provided the rational window-dressing for what was fundamentally an appeal to sentiment. The car stood for flexibility, independence, freedom—even self-expression.

That's all changing. In the US alone, commuters spend an average of 42 hours per year¹ stuck in traffic, even as their cars spend 95 percent of their time sitting parked². And parking itself accounts for about 30 percent of congested downtown traffic, according to a recent analysis of studies on congestion that were conducted around the world over the past eight decades³.

It comes as little surprise, then, that in the competition for the younger buyer's attention, mobile devices appear to be winning over increasingly immobile vehicles. For automakers whose profitability has depended on the relatively small number of people willing to pay a premium for performance, the threat is palpable.

And yet, several of the same technologies powering mobile phones may soon help solve many of the problems cars now face. These developments will likely appeal to the much larger group of people who are willing to pay for convenience and comfort—to make driving easier through increasingly autonomous functions, and to make it more productive and enjoyable by enabling drivers to use their time more effectively.

To reach that future, cars will need unprecedented connectivity—a capability automakers have developed only to a limited degree. Indeed, as much as the industry has already invested, its attempts have often proved frustrating to customers whose standards for simplicity and usability are shaped by consumer technology giants.

The difficulty for automakers is that much of the expertise required to enable connectivity lies in other industries. In a sense, before vehicle and drivers become connected, the automotive industry must make entirely new connections of its own, so that it can design the solutions that will meet people's evolving transport needs. And that boils down to acquiring talent, whether by recruiting or through partnerships and sourcing relationships.

¹ <http://mobility.tamu.edu/ums/media-information/press-release/>

² <http://www.amazon.com/High-Cost-Parking-Updated-Edition/dp/193236496X>

³ <http://www.accessmagazine.org/articles/spring-2011/free-parking-free-markets/>

Make connections

Automakers have made a start. Since the internet boom in the late 1990s, ten of the global OEMs and five of the big system suppliers have opened offices in Silicon Valley, collectively employing hundreds—by this writing, very likely well more than a thousand—of specialists working on future automotive topics to be transferred to headquarters around the world. Earlier in my career, I worked for one of them; over the course of several years in academia, I watched those offices develop real influence in Stuttgart, Detroit, Tokyo, and elsewhere. It is fair to say that smartphone integration, user interfaces, and electric powertrains would not be the same without car companies' Silicon Valley presence—such as the groundbreaking work enabling new technologies for in-vehicle mapping, entertainment, and telecommunications.

Now that influence must grow still more, with companies exercising even greater care in maintaining the delicate cultural balance required for Silicon Valley outposts to thrive. The danger is that an essential part of these offices' value—their entrepreneurial, disruptive nature—may end up lost as they mature.

They're already vulnerable to miscommunication. It's a widespread story from these offices' early days: Silicon Valley technologists work side-by-side with headquarters engineers on a breakthrough innovation, only to feel the momentum dissipate in culture clashes with other parts of the organization. What might have been a quantum leap in safety or efficiency instead becomes a footnote in the annual report.

Manage different

Companies are learning quickly, and many are working especially hard to keep the best of Silicon Valley. They're starting by making a deeper commitment to the distinct employee value proposition that the Valley requires, and thinking carefully about the skills they need to attract. Once they bring the right people in, they're encouraging them to form deep bonds with the broader Silicon Valley community. Finally, they're encouraging a more open dialogue between headquarters and the Valley, so that both sides of the equation can maximize the Valley's value.

A different employee value proposition. Historically, automakers have shaped entire cities in societies where people often aspire to work only for that company—and in return, the company creates a social compact of cradle-to-grave benefits. But what prospective employees want in Silicon Valley usually bears little resemblance to what their peers want in automakers' homes.

What matters to a much greater degree is whether a company has big ideas for profoundly changing what people think is broken, such as providing instant access to the world's knowledge or connecting billions of new users to modern communications. In this context, a firm's stability and legacy count for much less than its seriousness about disruption and the future. For automakers, that typically means reframing their purpose: not as building the best car, but as solving transportation needs.

Different work content also means a different work style. Employees' portfolios, for example, will need a greater emphasis on experimental and entrepreneurial efforts whose payoffs may not be immediate, or even clear. At the same time, prospective hires looking for more creativity in what they work on are likely to demand more latitude in how they work and where. They'll want greater flexibility in everything from the schedules they follow (not "clocking in" for a standard 8 hours) and the IT tools they use (not the standard-issue laptop), to the access they have to senior executives (not a complicated set of protocols and permissions).

A different employee profile. But the capabilities that those hires will need will be somewhat different than the ones that are typical of Silicon Valley, especially in "soft" skills. While finding brilliant coders is easy in Silicon Valley—if expensive—much rarer are people who combine excellent technical chops with the skills and inclination to manage interpersonal relationships well. But these are at least as important as traditional "hard" engineering skills in persuading change-resistant organizations to embrace innovation.

Within those constraints, companies should plan for a mix of Silicon Valley hires and employees transferred from other parts of the current organization—emphasizing people with strong potential who are chafing under the traditional culture. There is no magic ratio: I know companies that have very few expats, others a lot, and still others work toward an equal balance. Regardless of the actual numbers, the goal should be to maintain sufficiently strong ties both in Silicon Valley and in the corporate organization.

Network promotion. With innovation as a Silicon Valley office's natural focus, keeping an ear to the ground through a strong external network is far more important than would be typical at headquarters. In my experience, people in the Valley often get much more done in casual meetings at a coffee shop than in formal meeting rooms at the office. Just starting a conversation with, "Tell me about what keeps you awake at night and I will tell you what I am chewing on—maybe we can do something together..." can lead to invaluable insights. Far from being distractions, conversations such as these are essential for long-term credibility in Silicon Valley.

Accordingly, that external focus must also become a part of the evaluation process. For instance, engineers' annual performance reviews should assess them by how often they host a hackathon or attend public panel discussions on the latest developments, such as in artificial intelligence, Java applications, or charging-station networks. The quality of the person's interaction is equally important; not just listening but actively contributing by sharing select insights as part of a true community.

Communicate, communicate, communicate. One of the most challenging gaps that the office and the headquarters must typically bridge cuts to the core of what the office is designed to do: find innovation opportunities. The problem is that while developing innovation may be the primary reason the office exists, listening to innovation is not the only reason the headquarters exists. Instead, innovation may compete with a long list of priorities for overburdened headquarters teams who are racing to meet narrowly defined targets.

Under these constraints, it's hardly surprising that a headquarters engineer's reaction to the latest from Silicon Valley is often, "We tried that years ago, doesn't work"—not realizing how quickly technology may have progressed in the interim. After all, the very same headquarters engineers are reinventing the automobile from scratch every seven years or so as new platforms are birthed.

Making breakthroughs is therefore only half the effort. The office must communicate them in a way that that the headquarters can use them. Excellent technical skills alone won't sell an idea to headquarters: Silicon Valley engineers must master personal connections and people skills. The "elevator pitch," which many Silicon Valley minds have honed, needs to be adapted to the more traditional corporate world, where most projects are less "cool" and elevators seem to move horizontally as often as vertically. It's therefore up to the office to determine how its work can help HQ teams meet their current mandates and develop relationships with headquarters that smooth the path to implementation.

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Silicon Valley can provide automakers with a rare opportunity to lead the most important transformation in the industry's memory. Turning the potential into reality will test organizations' flexibility and resilience, but will yield new strength as companies reimagine what personal transportation looks and feels like for the coming decades.■

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