BUILDING AN ENGINEERING CULTURE

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"Excellence is an art won by training and habituation: we do not act rightly because we have virtue or excellence, but rather have these because we have acted rightly."

- Will Durant

INTRODUCTION

Building an engineering- and technology-led culture is the hardest and most important challenge faced by entrepreneurs building tech companies. Great technology companies are valuable not because of their IP but because they are engines equipped to discover and build the tools necessary to solve hard problems and achieve their vision. People power these engines, and getting culture right in a young, fast-growing company requires a significant, ongoing investment in strategy and tactics that involves the entire team. We've noticed many of the great technology companies share several key characteristics and want to share what we've observed as well as highlight three foundational principles that lead to top engineering cultures.

TOP ENGINEERING CULTURES

"I have a great idea in a huge market, I just wish we had some great people to build it. Can you help us find a couple of elite engineers?"

This question is like asking a famous sales leader if they can find a few customers for you; it's missing the point of engaging that advisor. Yes, recruiting is hard. The old-fashioned institutional mentality views engineers as cogs in a machine, whirring along and stamping out parts. As individuals and groups with this view get exposed to Silicon Valley-style technology companies, their instinct morphs to view engineers as shiny coins, to have and collect.

This is still the wrong model, and the leader above is asking the wrong question. The problems an engineering team works on are some of the most important aspects of the job for any prospective hire. A strong, technology-driven culture signals to these recruits that the company values challenging problems. The companies that are most successful in recruiting great engineers focus on establishing a technology-centric culture early on and maintaining it as the business grows into other functions.

Just like building a top sales culture requires a focused set of processes and principles, creating and maintaining a top engineering culture is a long term, institutional effort. One might be able to convince a few good engineers to join a company before nailing down the core principles, but without the right culture and mindset the engineering organization will not go far. If one creates and maintains an amazing technology culture, recruiting is still challenging, but eminently possible.

A great sales organization creates and iterates on their pipeline strategy and develops processes at every step. There is a culture of driving to metrics, closing, and helping customers win; this culture in turn powers an execution engine that moves the company forward with increasing velocity. Similarly, we have observed that great engineering organizations have a few key characteristics:

- **Engineers lead** with the support of the rest of the company. Building technology platforms requires long-term vision, matching that vision to what will actually be used, and an intuitive understanding of the technical implications of that match. The engineering organization is the only part of the company with this combination of skills. Even the very best sales teams quite rightly devote their focus to winning the current quarter. Allowing sales or similar parts of the company to drive product development may result in very strong execution for several quarters, but eliminates a longer-term effort that owns a market. Top engineers are the keepers of culture in a technology company, and truly great things happen with their complete buy-in. Getting that level of involvement

sometimes takes many long, iterative conversations, but magic happens when the culture is completely aligned with the vision for the company.

- **Individual engineers are encouraged to develop a deep understanding of and near obsession for their customers and industry**. More so than any other function, engineers face an immense amount of individual design choices every day–many of which significantly affect the end result. Companies that keep their engineers behind locked doors have a fundamental misunderstanding of what engineering actually is. Conversely, engineers' direct exposure to customer environments–whether that means installing the company's app on their personal phone or living on-site for a week or more–allows the people actually making design choices to develop an intuition for what will win.

- **They ship**. A vision only manifests if a team executes against it every day. The very best engineering teams have a palpable velocity and sense of urgency: *this* will solve pain, *this* will be revolutionary, *this* will change how people think about my industry. Engineers thinking about joining a company should ask: is great work getting out into the world, or is it stuck in endless design reviews, side projects, or deprioritized ticket queues? The best engineering organizations rapidly push products and features into real-world use, pay attention to the results, and iterate on what they learn.

- **The craft of engineering is deeply appreciated and rewarded**. Engineers have a unique ability to literally *make* lives better through technology. A culture that celebrates this potential attracts the engineers who will fulfill it. The best technology leaders recognize this capability and help engineers develop the skills to discover, design, and build over the course of their careers. It is crucial to reward the skillsets of both the masters of their craft, and the people who support them as they develop that mastery.

SO HOW DO YOU GET THERE?

A Cohesive Strategy Matters
The investment to create this culture extends far beyond terrifying technical interviews and other mechanical screens for talent; it must be a cohesive strategy that plugs a company into the larger tech ecosystem. This strategy starts with the company vision and should inform which external events the company goes to, what kinds of meetups and guests the company hosts, and who on the team should attend. For example, if mobile engineers are critical to the success of the company, the CEO should be speaking and writing about how their mobile product is changing lives and the engineering team should be hosting educational sessions on noteworthy items. For example, Addepar–one of the top engineering cultures in tech–hosts developer competitions that both engage the top engineers in the country and showcases that many of those engineers call Addepar home.
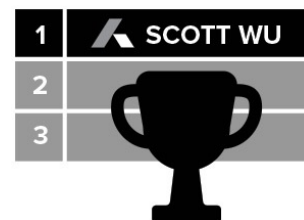
Engage Everyone
It is essential that the engineering team understands and is involved with shaping the company culture. Individual engineers are the best recruiters; given the tools to communicate the company's vision, they organically grow the team by engaging their personal networks. When it feels like the mission is truly important and a major win is just within reach, engineers start calling their friends, encouraging every smart person they can to join the company. Everyone at the company should

feel proud to expose their friends and mentors to the culture and opportunity of their organization. A major part of a CEO's job is to help inspire that feeling by building that culture and momentum.

Elite teams proactively engage with top engineers outside the company when the team does something particularly great in the engineer's area of interest. They keep following up every few months, helping the engineer feel the sense of opportunity and velocity of the company. When the individual is just starting to think about his or her next move, they pounce with a hard sell.

Incidentally, one of the strongest indicators of success for us as investors is when great engineers want to join a business. That can't be faked; people don't recruit their smartest friends or close the very best people without something special happening.

Use Your Allies
Companies are not alone in this endeavor and can proactively engage their allies in high-leverage ways. The best companies don't ask for individual referrals, but instead seek strategic mentorship on building organizations. Likewise, the best seek out the top thinkers in their space to get them excited and inspire them to share the company's vision. These companies engage their friends, advisors, and investors to triangulate on top leaders, bringing them to small company events or formally engaging them as advisors and mentors. We believe creating this sort of ecosystem around a company scales recruiting efforts far beyond the core team, which in turn attracts the very best to the company. Building a company is a team endeavor, and recruiting should reflect that.
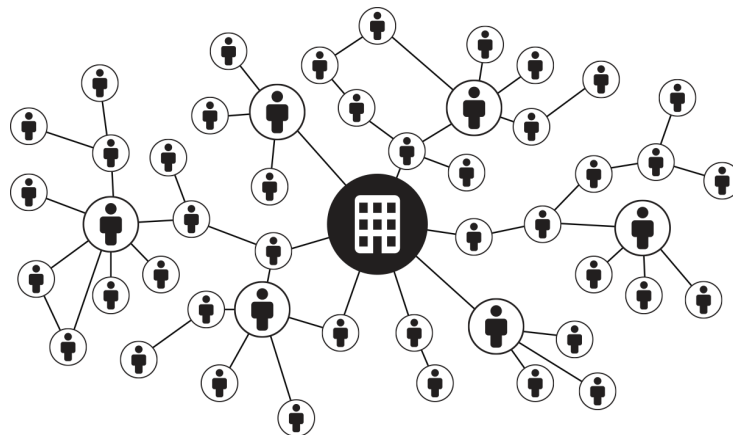
Top Engineering Cultures Win
Industrial economies focused on stamping out part after part; knowledge economies instead focus on better tools and services, where what is known is productized, automated, and abstracted away, freeing humans to focus on the frontiers. Good engineering is critical to these new economies, which in turn means finding and recruiting the best engineers.

The companies with the very best engineering engines made a significant, early commitment to invest in and seek out their talent. Places like Dropbox, Google, and Palantir all made this investment and have built their organizations in very deliberate ways. As a result, each was able to focus on the hard technology challenges within their business in their earliest days. Solving these challenges has built organizational muscle memory, allowing them to take on even harder problems as their businesses have skyrocketed.

There are no shortcuts to building a top technology culture. Much like training to compete for gold in the Olympics, changing an industry with technology requires an obsession that borders on being unhealthy. The best leaders passionately work long, hard hours, and are there with their team confronting the problems of their industry. The culture will follow the example the leader sets; having a leader who is a great engineer, setting the direction for the company, and willing it into existence, is irreplaceable.

Formation 8 focuses on helping these kinds of top technology cultures. Investors can never create a culture, but as allies we can help entrepreneurs attract and close the most talented people in the world. We work with a lot of our friends and other entrepreneurs about the best ways to create and guide these cultures, and are often fortunate to invest in the most inspiring ones with the strongest and most passionate teams.

Fundamentally, we are not investing in what a company is doing today, but what that company will be five or ten years from now–which means investing in its people and culture. The best people come to companies with inspiring visions, and the greatest visions are only achieved with the best people. Entrepreneurs have to start this cycle, but as investors and friends, we can act as an accelerator. Ultimately, this means helping to create places that inspire and leverage the world's most talented people. We are proud to aid these extraordinary groups as they push frontiers and move society forward.

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