

URL: <https://stvp.stanford.edu/clips/systematize-innovation>

Astro Teller, director of the moonshot factory at Alphabet known simply as X, explains how he is a "culture engineer" and how he systematizes innovation by creating a work environment where employees are encouraged to be audacious. He says they are given the freedom to work on projects that inspire them and that they want to own - whether they fail or succeed.



## Transcript

- I'm a culture engineer.. The thing that excites me the most is not making stratospheric balloons, or self-driving cars, or working on contact lenses, or on UAVs that can deliver packages.. The thing that excites me the most is trying to systematize innovation.. And, when I was young, I used to think that systematizing innovation might be some combination of things you could get if you just went to all the business books, and you picked out the smartest things from each of the business books.. Hire the smartest people and fail fast, and this, and that, and the other thing.. It's kind of true, it just turns out that if you do that, you don't actually get much innovation.. What excites me is, what would it take to actually get a group of people to do the things that it says in those business books that you guys have all read.. If this is the set of things they should do, and this is the set of things they do do, and for any of you who've been in business before, you know how big a gulf there is.. Wherever you worked, I promise you, that gulf existed.. There's a reason that there's such a big gap between the things that you want them to do, and the things they actually spend their time doing..

It's because this is the lip service that you're giving, but this is this paths of least resistance, emotionally, to doing those things.. They don't care what you said they should do.. They're going to follow the paths of emotional least resistance.. Cultural engineering is the process of trying to get this, the paths of least resistance, to actually line up with the things you want them to do.. So I'm gonna give you a few examples.. The first one is, let me unpack a little bit more about the audacious goals some more.. Here's how most companies do something sort of like the audacious goals.. Have you guys heard of OKRs? Objectives and key results? So this is the way objectives and key results actually works in a business.. You, are gonna need to be, you report to me, and you're gonna have to be held accountable by me, because I'm the manager.. So we're gonna start this weird haggle situation..

We're gonna figure out what your OKRs are.. You're gonna try to haggle them as low as you can.. Sandbag, sandbag, sandbag.. Because you know I'm gonna hold you accountable for whatever it is that we decide on.. So then I can feel you pulling them down, so I'm gonna pull them up, up, up, up, up.. I wanna haggle, haggle, haggle, you can do more, you can do more, you're sandbagging.. And we end up in this place in the middle, where now you feel like you don't really own that OKR.. It's higher than the things that you were saying and you were making all these arguments about why that's an unreasonable number, or metric, for me to hold you to.. It's either the wrong metric or it's too big, relative to what you think you can actually accomplish.. And I feel bad too, because I feel like it's two-thirds or half of what I actually was trying to talk you into..

So now we have this thing that neither of us believes in, and this is the OKR.. This is a stick, it's a weapon.. And my management plan for the entire quarter or year, is I'm going to beat you with the OKR stick.. You're not doing it enough, you're not doing it enough.. This is 21st century management somehow.. It doesn't work very well.. This is not how to get people to be innovative.. You cannot get them to do the things you really want them to do, especially if your lip service includes things like creativity, and failing fast, and being transparent, and a lot of emotionally hard things, while you're beating them with the OKR stick.. Crazy idea, what if instead, you just got to pick what you were gonna do? Let's call it your audacious goal for the quarter.. It's your goal, I'm not gonna haggle with you about it..

You pick it.. You get up in front of all of us, once a quarter, and say I'm gonna try to get this thing done, and I know that I'm almost certain not to get it done, but I'm proud of the fact that I'm going to try to do something that sounds so crazy hard, so unlikely.. The goal is to have it be something that you can accomplish about one-tenth of the time.. If you're positive you're

not gonna accomplish it, that's not very interesting, you're not really gonna try.. On the other hand, if you're confident you're gonna do it, it's not audacious, by definition.. So you want it to be in that sort of 10% range.. And, you're going to end up getting held accountable by yourself, because you picked it, and by the whole community because you want everyone to be proud of you.. Now, I can be your coach and mentor, instead of having to beat you with the OKR stick.. So, at X, we have audacious goals.. And every quarter, every team gets up and says here is what our audacious goal for the quarter was, here's how we did against it, and here's what we're gonna try to do for the next quarter..

And some teams don't do it some quarters, and that's actually OK, too.. They don't look as audacious when they don't do it, but that's fair game, because you need to be crisp about what you're gonna do if you're gonna try to do it...