



Stanford eCorner

Technology Must Solve Problems

Cyriac Roeding, *Shopkick*

October 16, 2013

Video URL: <http://ecorner.stanford.edu/videos/3198/Technology-Must-Solve-Problems>

Whether you are designing a feature, creating a product, or building a company, your technology needs to be solving a real problem for your customers, says Cyriac Roeding, founder and CEO of Shopkick. Roeding describes how his company only began working on technology when it was explicitly needed to solve a key problem.



Transcript

I would like to talk a little bit about business models because that's sort of one of those things that we don't talk about enough I believe. We all talk about let's start another Instagram, right? Cool, let's do it. Instagram is an awesome what? Product. Product. Awesome product. It's a great product. I love it. Is it a company? No. Could it become a company? Maybe. It's too late for that.

It just got acquired but it is - essentially it can still become a company within Facebook of course, but it was a product. And so if you want to build a company - and that's a decision anybody can make. I am not passing any judgment. I really am not. I really think it's great to build an awesome feature. I think it's great to build a great product. It's also great to build a great company. And you have to decide as an entrepreneur which type you are. What do you want to do? I like to go the road of starting companies because I like to build things that last. And I like to sort of like create things that get established and they can prosper and they can grow and people can work there and it can get larger and it can change people's lives for a long time.

So that's my passion. And everybody needs to know what their passion is. So business models are very important when you want to build a company. What is a good business model? So the first thing that you need is an answer to the question: whose problem does this solve, who is the possible person who actually has a problem? And if you're trying to build a technology first and then find a problem to that solution, then you have a problem. What was that? . Yes, so I'm not going to repeat that one. So there are lot of different companies that get started around a technology and then you're sort of fishing for the problem that this solves. And it's very exciting but that is not a good company idea. So in the case - I want to just use that as an example. So the rewards for walking in you remember that? rewards for walking in.

So how do you know somebody has walked in? GPS can't do it. The accuracy level is two blocks. You can check into a Starbucks right from here and it's two blocks away. That doesn't work. So how do you do it? We had to come up with a whole new location technology. And there was no other technology out there that could solve our problems. So we actually had a problem, we called it 'the threshold problem', because we needed to know whether somebody has crossed the threshold of a store. It's actually really hard to do. So my first idea was maybe you can look at degrading satellite signals as you walk into a structure - a building and therefore identify that you've just walked into a building because the quality of the satellite signal just went down. Well, that's really nice but that data is not available.

You don't get that from Apple or from Android, you don't know that. So therefore we had to come up with a new technology, and basically this is a little box that you plug into a power outlet and basically it emits an inaudible audio signal at 21,000 hertz, above the range of human hearing. And inside the signal is a unique code embedded that's different for every store. The microphone of the smartphone can pick it up, decode it and knows exactly which store it's at. It's so accurate that we would

know whether you're in this room or just next door in the hallway. And that's the kind of accuracy you need if you want to reward people. It's something that has monetary value. It's not so cool to reward people for being in the parking lot or worse next door at a competitor store. So what I am trying to get at is not how great shopkick was, but actually it was important to create this. Without it there was no company.

So we had to wrack our brains how we solved this problem and create a technology around a consumer problem that we were trying to solve. And now iBeacon is coming into the game and Bluetooth Low Energy and those technologies have lots of problems too. They bleed through walls, they are spoofable and so on. But there are ways to combine technologies and make them really hot and basically you take the upsides of different technologies and avoid the downsides of them. So the problems remain. They keep going. The point I wanted to make is, if you want to break the egg you have to be very creative. And on the technology side when you create a business model, it's great to have a poor technology but it has to solve a real problem.