



Stanford eCorner

Case Studies of Innovation Solving Problems

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As the Chief Technology Officer of the United States, Aneesh Chopra wants entrepreneurs to understand that the federal government can help businesses be successful. Here he shares examples of innovative citizens who are harnessing technology and open data resources to build useful products and profitable startups. The examples include web and mobile applications, as well as products that mine data to provide efficiencies in the education, financial and human health sectors.



Transcript

That we have a philosophy in Washington that if we're going to tap into your entrepreneurial spirit, we have to be responsive in kind. Because it turns out, Washington can contribute to your entrepreneurial capabilities. We can release data, we can engage in standards activities and we can invest in pretty competitive R&D collaboration. To manage all of these, we need the capacity and so we've been recruiting people from the entrepreneurial sector into our agencies. Example one, people that are building value on their own data. The Alfred brothers from San Diego found out that 401K management fees vary tremendously based on the size of the company. If you work for a small business, you could pay 5, 7, 8, 10 percent management fees. You work for Stanford you're probably paying 1 percent. They cumulatively added it all up and said \$4 billion of access management fees are going to the companies, not into the pockets of folks with their retirement. How do they find all this out? Open data.

The labor department collects the management fee information for every 401K plan in America and thanks to President Obama's open government directive, we gave them that information in machine-readable format and got them the data they needed to plot their diagrams and prove the problem. And now, they've build a startup hiring 30 somewhat people and growing, making a business out of closing that, creating an arbitrage. Doctor David Van Sickle lives in Madison, Wisconsin about an hour north, does not have broadband in his house, identified or built a GPS chip on asthma inhaler that calculates, tells you where you're located in the time you pumped you asthma inhaler. By crowd sourcing that data, he finds environmental factors and it encourages you to better manage where you are and what you're doing so that you can avoid uncontrollable asthma. And his little prototype, he cut uncontrollable asthma by over 50 percent. Folks, people with uncontrollable asthma cost the health care system \$3,000 a year. Data, lowering cost, improving value, Dr. Van Sickle. Bob, Dave and Andrew are three random dudes here in Silicon Valley, who worked for a company and found out about this open data business, looked for the largest file available; the largest file available was the Federal Register, which is the newspaper in legalese that tells you what's happening in Washington every day. These guys grabbed that data and turned what was only accessible to lawyers at Washington, into a pretty simple to use and easy web experience so that you and I could actually figure out what's happening in technology today.

I actually use this. It's a heck of a lot better than reading the Federal Register in the normal way. Well, after they won the apps for innovation contest that the consumer electronics association, three months later the archivist of the United States, or AOTUS as we call him, picks up the phone and calls these guys and says, "Your design is a hell of a lot better than my FederalRegister.gov. Could you take over the site?" And they did. Bob, Dave and Andrew came to the 75th anniversary ceremony for the Federal Register where they filmed the National Archives movies, the movies that's National Treasure. You

know, that's pretty cool stuff, they're sitting there on the stage. Bob, Dave and Andrew, you've got to give them some love. Professor Wolski had an idea to create an Amazon cloud for universities, was successful in scaling it. His first customer was NASA. His proof of concept was funded by the government and now he's launched a startup and he's become a wildly successfully entrepreneur in Eucalyptus systems.

Katie Stenne. I love Katie Stenne. Katie Stenne came out of Google, came into Washington to work of us in the new administration. Katie's now at twitter, but during her tenure in Washington, you remember the crisis in Haiti? Folks, when the earthquake Haiti, they lost any functional 911 service. No functional 911 service. Within three weeks, Katie organized a group of 40 entrepreneurs, nonprofits, innovators, many of them are living here in Silicon Value and they created an instant 911 system. Folks could text message their problems to 4636 at no cost. That information was sent on the web. Entrepreneurs then allowed to find Creole to English translators, turning Creole to English, disseminating those messages throughout the recovery program. And wouldn't you know it; 40,000 messages were translated.

Average turnaround time for when someone posted a problem to one might where addressed by a first responder, 10 minutes in a world where they had no 911 system. And our friends in health care. My friend Peter Levin, a startup successful entrepreneur, created the blue button program that allows any veteran to download a copy of their personal health data safely and securely. Over 300,000 members of our active duty military, our VA, and our Medicare populations have now downloaded their data because in 90 days, Peter and his entrepreneurial team came together and built the prototype and now, it's been wildly successful. The President mentioned it in the state of the union. Arian Malik was a vice president at RelayHealth. It turns out doctors couldn't email health records between each other because it violated patient privacy and security. Arian came in to run a 90-day project to get the private sector to agree to a technical specification for safe secure email called the, "direct project". It was so wildly successful that one year to the day when we launched it, 95 percent of the vendors in industry have pledged to adopt the protocol. A protocol built by Arian and his team.

This is the story of Washington. These are the people that were gathering to build it and it is our goal, our hope that this infrastructure that we're building will support you as the innovators of 21st century so that you can solve the health, energy, education challenges, become wildly financially successful at the same time, and help your country.