NOTEBOOKS

Expert opinion

VENTURE CAPITAL

Finding People to Reinvent the World

CHOOSING STARTUPS TO INVEST IN IS A HUNT FOR PEOPLE AS MUCH AS TECHNOLOGY, SAYS WESLEY CHAN.

As an investment partner with Google Ventures, I am often asked how I decide which startups to back.

An encounter in a tiny San Diego office in mid-2004 helps illustrate my answer. There I met Paul, Brett, Jack, and Scott, the scrappiest and most creative founders I had ever seen. They constructed their own office furniture to save money. To increase awareness of their product, they would sneak into trade-show parties sponsored by well-funded competitors and bribe bartenders to distribute hip-looking decals. Without much money in the bank and under heavy competition from a dominant market leader, they proved themselves able not only to survive but to thrive. They had created a service that was well designed and had immense potential. They knew exactly how to adapt their product to handle 10 times as many users when success came, but they built it without spending on expensive equipment to serve users they had not yet acquired.

Six months later I led the acquisition of their startup, Urchin Software, which became the inspiration and foundation for one of our most successful products, Google Analytics. But for all its founders' good points, acquiring the company was not the obvious choice. Skeptics inside Google pointed out that Urchin was not the market leader or even the best-known among the 30 analytics providers we considered. I had to pound my fist on the table in many meetings, declaring that this was the right horse to back.

When people ask why I was so certain, my response harks back to that meeting in San Diego. Urchin's founders, who are all still with Google, may not have had the best-performing startup, but they were the best founding team around. Great founders need the technical aptitude, motivation, and personal skills to make a product take off. They proved they had all that when, 72 hours after it launched, Google Analytics was overwhelmed by demand. Paul and his team rapidly recruited and motivated new talent to rearchitect the service's back end. Analytics opened shortly afterward with the capacity to handle an order of magnitude more traffic. Great founders understand how to deal with unprecedented issues and come out ahead.

They also use feedback from users and the market to dramatically increase their product's growth. For example, we decided to offer Analytics free of charge when we realized that this would allow Google to engage online advertisers it hadn't been able to reach before.

So how do I invest at Google Ventures? When I fund a company, I'm looking for people with the kind of potential that Urchin's founders displayed: extraordinary entrepreneurs who can build game-changing products.

WESLEY CHAN IS A PARTNER AT GOOGLE VENTURES, THE COMPANY'S VENTURE CAPITAL INVESTMENT ARM. HE IS ONE OF THE 2010 TR35 (P. 56).

SOCIAL NETWORKING

Why Privacy Is Not Dead

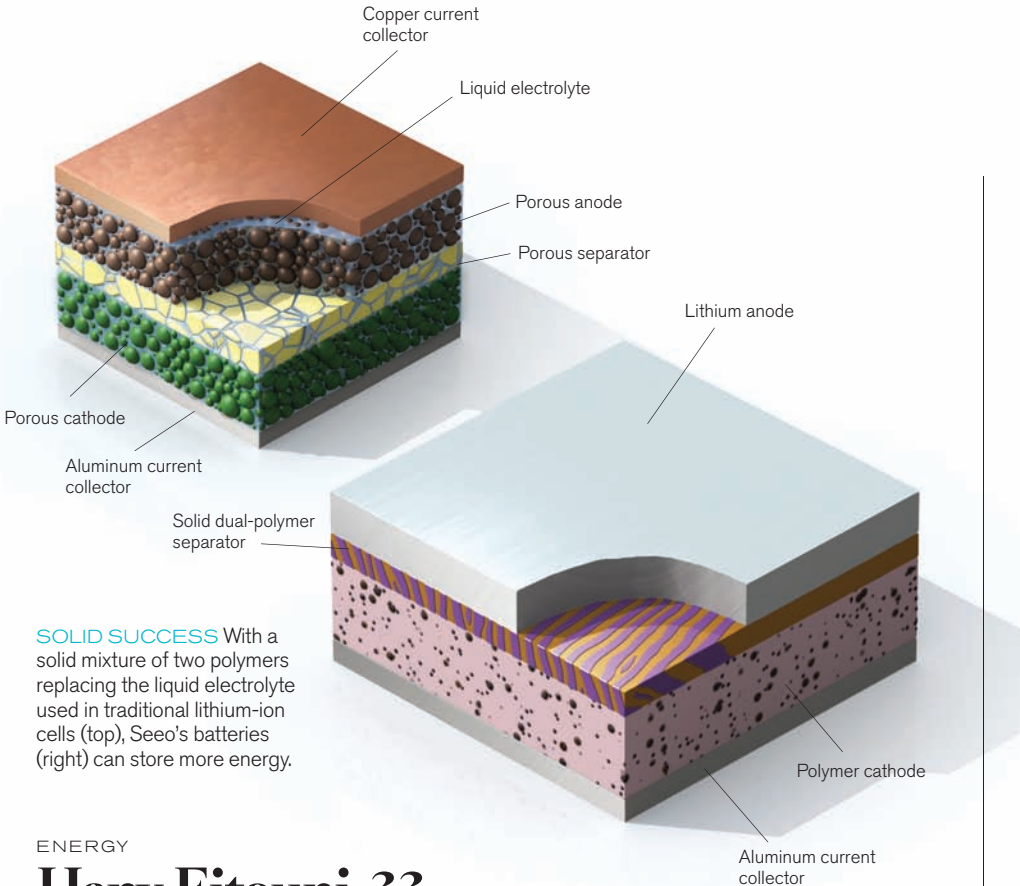
THE WAY PRIVACY IS ENCODED INTO SOFTWARE DOESN'T MATCH THE WAY WE HANDLE IT IN REAL LIFE, SAYS DANAH BOYD.

Each time Facebook's privacy settings change or a technology makes personal information available to new audiences, people scream foul. Each time, their cries seem to fall on deaf ears.

The reason for this disconnect is that in a computational world, privacy is often implemented through access control. Yet privacy is not simply about controlling access. It's about understanding a social context, having a sense of how our information is passed around by others, and sharing accordingly. As social media mature, we must rethink how we encode privacy into our systems.

Privacy is not in opposition to speak-

NICK REDDYHOFF



SOLID SUCCESS With a solid mixture of two polymers replacing the liquid electrolyte used in traditional lithium-ion cells (top), Seeo's batteries (right) can store more energy.

ENERGY

Hany Eitouni, 33

Making safer batteries with solid polymers

Seeo

Hany Eitouni has built batteries that are safer, longer-lasting, and able to store more energy in a smaller space than the conventional lithium-ion cells commonly used today. His technology, Eitouni says, could be used in next-generation electric cars and even in the electric grid, which would be a new application for lithium-ion batteries.

While working at the Lawrence Berkeley National Lab, Eitouni figured out how to replace the most dangerous component of lithium-ion batteries: a flammable liquid electrolyte that conducts electricity between the positive and negative electrodes. The more energy packed into a battery, the higher the danger that the liquid electrolyte will catch fire. Previous researchers had tried to sidestep this problem by using gel polymers for the electrolyte, but even these contained flammable solvents.

The solution was a solid material that is made of two linked polymer chains. One polymer is almost as conductive as a traditional liquid electrolyte but a lot less flammable; the other, which is also less flammable, provides mechanical stability so that the electrolyte doesn't turn into goo. And the battery lasts longer than traditional lithium-ion or previous lithium-polymer cells because the polymer doesn't react with the charged electrodes.

To commercialize the technology, Eitouni cofounded Seeo in Berkeley, CA, in 2007. He says that the startup's battery keeps 90 percent of its storage capacity after 2,000 charges (traditional rechargeable batteries lose nearly a third of their capacity after about 500 charges). It also stores 50 percent more energy per kilogram than commercial lithium-ion batteries. Seeo is building a pilot factory that will make large battery packs to smooth out spikes in supply and demand on the electric grid. It's expected to be completed in 2011. *—Kate Greene*

INTERNET

Wesley Chan, 32

Building new technology businesses

Google

WESLEY CHAN has a knack for turning good ideas into new businesses—and doing it with minimal resources. In 2005, Chan's small team at Google, which incorporated two start-ups he acquired for the company, launched Google Analytics to provide a free version of the tools the search giant previously used internally. In 2006, he dreamed up another free service, Google Voice, which launched in 2009. This one offers automatic transcription of voice mail, the ability to use one number for different phones, and many other features. Given only two company engineers to work with on the project, Chan acquired the startup GrandCentral in 2007; he and his new crew spent the next two years putting the service together in secret.

Google Voice now has millions of users. But Chan has moved on again and is now a partner at Google's venture capital investment group, Google Ventures. He still invests in software but is free to cast his net wider. In particular, he is developing an interest in stem-cell medicine, even though the field has no direct connection to Google's business. He says, "For me it's about going where I can learn the most, and making the output of my learning something that is world-changing." *—Tom Simonite*

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