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KEYWORDS

Has Silicon Valley Lost Its Way?

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Social networks that allow you to send only the message "Yo" to your contacts. Food-delivery services valued at $400 million. Startups that deliver rolls of quarters to your home (just $27 for $20 in change!).

It isn't hard, looking at a lineup like this, to conclude that Silicon Valley has jumped the shark. The entire Bay Area appears to have given up on solving anything but its own problems: those afflicting the same 20-somethings who are building these startups.

That's a pretty cynical take on what's going on in technology. And what about Google or Facebook or Uber, all of which have transformed or probably will transform entire industries?

But, to my surprise, the partners of one Silicon Valley venture-capital firm made the very same case to me: That their kind had lost its way—and, in the world of startups, money wasn't flowing where it should anymore.

"Do you believe there is more innovation today than 20 years ago?" asks Yatin Mundkur, a partner at Artiman, in Palo Alto, Calif.

Mr. Mundkur doesn't mean innovation in the areas of same-day delivery or "anonymish" social networks that seem to have more novelty value than staying power. Both of those categories are red-hot right now.

What he does mean is the kind of basic research and development that transforms lives, in fields such as energy, medicine or food safety, rather than just optimizing advertising platforms.

Consider this. The entire market for advertising is around $100 billion a year in the U.S. (Globally it's close to $500 billion.) Yet the nation's gross domestic product is more than $16 trillion.

That means every venture-backed startup chasing advertising revenue is going after just 0.6% of the economy. Put in employment terms, the ad-related economy employs just a few million people, versus 140 million Americans whose job it is to do everything else.

Still, the pursuit of advertising dollars includes about every startup that is going for scale first and says it will figure out how to "monetize" its users "once it has the eyeballs."

The problem isn't entrepreneurs, says Mr. Mundkur, it's the venture capitalists who are funding them, which has led to a distortion of the way our society allocates capital.

One reason: Venture-capital firms are bigger than ever, with many topping out at more than $1 billion. As a result, they need to make more bets.

Twenty or thirty years ago, venture-capital funds weren't an asset class by themselves, as they are now.

The stock market may be on a tear, interest rates remain low and more traditional investments—even whole regions, including the fast-growing economies of Brazil, Russia, India and China—appear shaky.

But, money wants to go somewhere, so it's going into funds that invest in tech.

According to the National Venture Capital Association, more money flowed into software ($11 billion) in 2013 than at any point since 2000, which was nearly the peak of the last tech bubble. Software companies are eating up 37% of all VC funding, the highest percentage since PricewaterhouseCoopers started gathering data on the subject in 1995. Overall, VCs invested $29.4 billion in 3,995 deals last year, or 7% more dollars than in 2012.

"In the U.S., we have many second and- third-world problems because our first wave of infrastructure came 50 years early, compared with the rest of the world," says Ajit Singh, another Artiman partner.

Few would argue that our transportation and energy infrastructure isn't dilapidated, but is it really Silicon Valley's responsibility to worry about these sorts of things?

"Should Uber get $1.2 billion?" responds Mr. Mundkur, referring to the Internet-based car service. "How many startups could be funded with that?"

One way to think about how venture firms direct their money is Maslow's hierarchy of needs, which describes all that a person requires—or, at the top of the hierarchy, his aspirations.

Facebook solves needs in the second-highest tier of the hierarchy—that is, the need to be esteemed and validated by others. What Artiman aims for, and this is the way it makes its critique of other VC firms concrete, are needs lower on the hierarchy, such as the need for food and safety.

The results, as I discovered in a brief tour of a few of their portfolio companies, are ambitious. One company, called Cellworks, spent six years creating a virtual human physiology that helps the company come up with new combinations of drugs to throw at existing diseases, all without first testing them on animals or even humans. Another, Nutrinsic, is tackling the problem of how we will feed the Earth's next billion humans; it is breeding bacteria that can turn the waste from food production into edible protein.

A third Artiman company, Aditazz, is applying the software and techniques used to automate the design of microchips to the design and construction of buildings. The results, Aditazz says, are buildings that cost 20% less to construct and go up in half the time. The company has won contracts to build a handful of hospitals in the U.S. and elsewhere.

It's hard not to look at round after round of funding for companies with negative cash flow, companies that are solving problems that afflict just a tiny portion of the planet's population, and think that the problem is really about misplaced investor enthusiasm: that is, the bubble that the tech industry may or may not be in right now.

Currently, there are nowhere near as many technology companies going public as there were during the dot-com bubble of the late 1990s.

On the other hand, companies like Google and Facebook are buying everything in sight for billions, sometimes tens of billions of dollars, which is one reason valuations remain high.

"I don't know if there's a bubble," says Artiman's Mr. Singh, "but there's definitely a whole sector that is overvalued."

My own view: Whether or not we're in a bubble isn't the issue. What matters is what we do with all the money that flows into tech when times are good.

And you don't have to be a venture capitalist to question whether, from the perspective of net social benefits, or even just long-term return on capital, the problem of replacing instant messaging is a better investment than countless other potential businesses in the $16 trillion real economy.

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