How and Why of Promoting Entrepreneurship Abroad
Hoover Institution
Stanford University

Charles Phillips: Entrepreneurship and the Information Economy

Richard Boly: Now it is my true honor to introduce Charles Phillips who is the President of Oracle. He's also a member of the Board of Directors, and before coming to Oracle, Charles was with Morgan Stanley and he served as a Captain in the US Marine Corps. Now this is important for my program: my other four counterparts in the program are all military colonels; so this means a lot. An important thing is that Charles is one of only two people from Silicon Valley – along with John Doerr – who are part of the Economic Recovery Advisory Board. So when we talk about what is Washington doing for the economic recovery, how does that impact the Valley? You've got the person right now: Mr. Charles Phillips who can help paint the picture. Thank you very much. Please help me welcome Mr. Charles Phillips.

Charles Phillips: Hello. Richard said we had a phenomenal speaker coming up, so I want to hurry up and make room for him, before he gets up here. This is a great forum I have to begin with – fifteen minutes. Usually most of my speeches have to go on longer than that. So, I like to get to the point, so having fifteen minutes instead of forcing it into forty-five is much better. So whoever came up with this, this is a great idea.

So let me give you some sense of kind of our perspective on things. I've been asked to speak about the perspective of our government's role on innovation and entrepreneurship, which, of course, is the lifeblood of the technology industry. And the timing of this couldn't be better cause we just had a meeting yesterday with the advisory board. There's about fifteen of us on the board. You probably read about it and know who they are: John Doerr is the other kind of the other representative from Silicon Valley; Jeffrey Immelt from GE is kind of the other somewhat tech company, but beyond that it's all walks of life.

And one of the subjects that we talked about – there's different tasks forces; I'm on the jobs task force and the energy task force – and between the two of those things, the discussion was around innovation and how do we get job growth back, and obviously everyone from Silicon Valley would naturally say we need innovation and companies and new industries, cause the old industries are going to shrink and sometimes they die; that's just the way it works. So first of all, let me get into that and give you one sentence on Oracle, those of you that may not familiar with Oracle. If you're from outside the country you may not be, but we are the largest business software company with about 89,000 employees, we operate in about 147 countries, so really global. And if the Sun acquisition closes this July – assuming the regulators cooperate with us, which I'm sure they will – we'll be about forty billion dollars in revenue then.

So think of us as the nervous system for business. There's over 300,000 businesses around the world where we automate all their key processes, store all their data, and they rely on us essentially to run their business. So we have a pretty good view of what's happening across

Special thanks for helping with the transcriptions: Leo Gomez, Jesus Gonzalez, Jeffrey Garcia, Matthew Long , Jake Garrett, Josh Simonidis, Nghia Tran, Ben Bunch, Alana Mounce, and Bianca Mounce

industries as people invest and why they're investing; which is kind of the view that the President was looking for, someone who operates across multiple industries.

So, government supported innovation is a subject that I think would've been a very short conversation a year ago in Silicon Valley. Those two things you didn't really think of together, but I would say for the last thirty years Washington hasn't really noticed what was going on in Silicon Valley and we didn't really notice what was going on there and care too much and everybody was happy. But a year makes a big difference and thinking has shifted a bit. And I think most of us grew up at the altar of free markets, but I've come to believe that there is a time when the government can and should play a role at jumpstarting innovation, so I kind of want to go over some of the suggestions that I gave the President.

So the first principle of government involvement in innovation should be to adopt the Hippocratic Oath, "Do no harm." The innovation formula is simple: bright people with energy and ideas surrounded by strong incentives, predictable odds, and access to capital. For the entrepreneur, the incentive of fortune and fame works as well, as long as there is the underlying presumption that he gets to keep that fortune, and not give it to his congressman. For the investor, it's the prospect of out-sizing risk adjusted returns. We know that this formula works so no need to update it. So that's kind of where we started. So what can government do: what do we want you to do in Washington? So we told them, at a minimum, government can provide essential leadership to educate market participants because sometimes they don't know about opportunities, generate cooperation where it's needed in certain industries, set national standards and align regulatory frameworks, which is needed in too many industries cause we have too many state which are conflicting, and that would reduce the cost and risk for investors.

So that should be kind of an ongoing set of activities that government is involved in at a minimum. But, there are times when government is also needed as a lead or co-investor for a new market. And sometimes it pays to have a comprehensive plan and not leave everything to the fate of the market because, as we've seen, sometimes markets are wrong. So what criteria should we look for to see that government has a limited role, and I underscore limited, in helping industry innovate? We came up with three basic things: number one, structural transformation is needed in an important industry that requires so much capital that it creates an unacceptable and concentrated risk for investors; number two, basic science or high risk investments of potential national importance with long-term paybacks that are beyond the scope of venture capitalists; and then three, inflection points in the economy where normal investment activity and capital is stalled.

Now I know the data suggests that governments don't have a terrific track record at finding innovators, but then again few people do. Even the professionals that scour the planet looking for innovation for a living, they are lucky if they can hit two homeruns out of a portfolio of fifteen. That's just the nature of the beast. So, if you're only going to count batting averages, there aren't many Ted Williams in the business. So, for those of you from the U.S., I couldn't think of a number analogy; if you're not from the U.S. well somebody will have to translate it, I guess.

Special thanks for helping with the transcriptions: Leo Gomez, Jesus Gonzalez, Jeffrey Garcia, Matthew Long , Jake Garrett, Josh Simonidis, Nghia Tran, Ben Bunch, Alana Mounce, and Bianca Mounce

We still need those homeruns to stay globally competitive and to be fair the government has had some big hits. The ARPANET was the forerunner of the internet, remember! And Oracle itself was the codename for a project to create a product to store the data efficiently at the CIA, and some government official took a risk, gave a contract to a young entrepreneur named Larry Ellison and that was Oracle's first customer was the CIA, the second customer was the NSA, the third customer was the Department of Defense. That's why we're so good at data security to this day. But who knows if Oracle would've existed if someone hadn't taken a risk and who happened to be in government.

And I also posit that the types of people arriving in the Obama Administration to help administer the stimulus package, many of them from Silicon Valley by the way, are different from the stereotypical bureaucrats that we are accustomed to; it is different. So now let me enumerate four building blocks for government-sponsored innovation. The first is to create demand: before the government tries to spur innovation, given where we are, we have to get buyers back in the market and right now, no one is in a buying mood, and recovery will be led by the commercial sector since consumers will be de-leveraging for years to come. We have a whole generation of people who have to learn how to save and live within their means; they've never done it before so it's going to be the commercial sector.

So to do that we have to jumpstart capital expenditures; I've been recommending accelerated depreciated schedules on selected types of modernization investments such as plant upgrades, network build-outs, energy-efficient projects, new data centers and, of course, software projects. But the list could be longer and we should officially classify more of these investments as capital expenditures instead of OpEx so we can protect income statements, and the policies should create the urgency to act now by limiting the incentives to the next eighteen months. The bottom of a downturn is a good time to upgrade and modernize infrastructure, given that many of us have excess labor capacity at the moment. This spending is the foundation of demand for innovative products since no one likes to modernize with the last generation of technology.

The second benchmark is that government has to pick its spots, it can't do everything. It has to select industries where it can make a difference. The most obvious example -- and I have a lot of details here since we met yesterday with the EPA – the most obvious example, of an industry needing structural transformation, large amounts of capital, and an updated regulatory framework is the energy industry. The government can and will play a key role there. Everyone has their own view as to how real the carbon threat is to the environment. Well let's set that aside for a moment. Even if you don't care about the carbon, that's not what's actually driving the investment, that's what's selling the investment, but it's not what's driving it.

The real issue is that our future energy needs simply cannot be addressed with the current energy infrastructure. There is an issue of national energy security and hence, the government has a logical interest and responsibility in making sure this problem gets solved. Expanding conventional energy sources such as a new dam, nuclear facility, coal plant, has become almost impossible in the U.S. There hasn't been a new nuclear plant built in the U.S. for twenty-five years, new dams face strong opposition from conservation groups, and coal is under pressure. In the meantime, investment in energy is plunging according to the International Energy Agency.

Special thanks for helping with the transcriptions: Leo Gomez, Jesus Gonzalez, Jeffrey Garcia, Matthew Long , Jake Garrett, Josh Simonidis, Nghia Tran, Ben Bunch, Alana Mounce, and Bianca Mounce

Oil companies and investors have canceled about $170 billion in investments because of capital constraints and the price to clients. And right now, based on companies we talked to yesterday, financing has all but dried up for wind and solar projects. That used to be plentiful.

So, in the U.S. I guess the discussion was we risk losing out on an important new industry. Only two of the ten largest solar panel producers in the world are based in the U.S., two of the top ten wind turbine producers, and one of the top ten advanced battery manufacturers in the U.S. No one knows how big this industry is going to be but I think we should have some players on the field; we can't ignore it. So the EPA is, I think, a good example of what they are doing well. They are taking a leading role, they've a somewhat impressive team on the issue, led by Dr. Chu, who many of you may know well – he's the Energy Secretary and also a Nobel Prize winning physics professor from Stanford. He's been consistent in saying we need breakthroughs and he's going to do it probably the way you would do it with co-investment. And it's the best type of financing because it's non-dilutive.

So, the EPA right now has about a $130 billion to spend, although some of that will go to clean up legacy projects. They've already allocated about $30 billion as of yesterday, and through the first one hundred days they have written about four billion dollars in checks to actual companies. They have eighteen billion dollars set aside for nuclear but that can only support about two to three plants. So co-investors do not have to be based in the United States; so they are attracting foreign capital. The projects span many energy sources in transmission and other aspects of energy supply chain. A very important point is that 80% of the dollars that have been allocated so far have gone to startups. These are companies that would not exist but for this funding. So to address the demand side you have to have a catalyst and that's where the recently proposed cap and trade comes in. This would force industrial customers to investigate alternative energy sources.

Nothing is free; it's going to cost. Based on the estimates out there by MIT, it's going to raise per capita costs for goods and services about $1,500 per person. It's a tax, there's no getting around that. The idea is that the carbon credits will be rebated back to the taxpayers, and in reality that never happens. So costs are just going to go up by that amount. That's a significant number; there's no getting around that but it's a price worth paying to ensure that we have an energy industry that is sustainable in this country. The alternative is to procrastinate and fall further behind. So this is an example of an industry that can transform itself that could not transform itself because of regulatory constraints and large capital needs, and right now we get about three percent of our energy from alternative fuel sources, compared to about ten percent of alternative energy sources in Europe.

The third is a building block as the government can buy time for people to re-skill. As we talked about yesterday, current U.S. law terminates unemployment benefits if you start training or going to school in any form on any site anywhere. You have to wait until your unemployment benefits run out before you can get retrained, or else they terminate your benefits. So we suggested that probably wasn't a good idea right now. And then the fourth – and huge one – is you need the best and the brightest. It's hard to deliver on these breakthrough ideas unless you have talented people. And we've been making some mistakes. We've shut down our brightest talent; we need

Special thanks for helping with the transcriptions: Leo Gomez, Jesus Gonzalez, Jeffrey Garcia, Matthew Long , Jake Garrett, Josh Simonidis, Nghia Tran, Ben Bunch, Alana Mounce, and Bianca Mounce

the top five percent of engineers in the world to want to come to Silicon Valley and right now there's a limitation on H-1B visas; they give out 65,000 a year, there' a six hundred thousand backlog that people would like to come here.

So those superstars are going to China, India and Europe. We also limit their access to our great universities but even when we do let them graduate, we send them back home to create companies to compete with us. So a few of the companies founded by immigrants, Yahoo, eBay, Google, half of Silicon Valley startups were founded by immigrants and about forty percent of the patents in the U.S. are awarded to immigrants. So this is not a time to close the borders. And generally population growth helps spur economic growth. Ask Japan how hard it is to turn an economy around when you have a shrinking population. So, we need these folks.

So, with that I'm a little optimistic that we have the right team in the White House to balance public and private investments. They're doing some smart things; they're being cautious about it. They're going more slowly than people would like because they're doing their due diligence but they're getting better at it. But there are always some risks; they're going to make some mistakes. But there is some optimal mix of public and private investment and incentives that will allow government and private industry to work together. I'd also like to remind everyone what happened in the 70s and the 80s: In the late 70s we had twenty percent interest rates, a tough recession, and declining productivity. A few entrepreneurs decided to plow ahead with their ideas. Despite all that bad news and during that dismal period, Microsoft was founded in 1975, Oracle in 1977, and Sun in 1982. Not a bad cycle after all in hindsight. So with that, have a good conference and keep the optimism up.

Special thanks for helping with the transcriptions: Leo Gomez, Jesus Gonzalez, Jeffrey Garcia, Matthew Long , Jake Garrett, Josh Simonidis, Nghia Tran, Ben Bunch, Alana Mounce, and Bianca Mounce