Stanford eCorner

The Diplomacy of Technology (Entire Talk)

Alec Ross, *Advisor to US Secretary of State*

May 26, 2010

Alec Ross, Senior Advisor for Innovation in the Office of Secretary of State and Co-founder of global non-profit One Economy, discusses in detail innovation policy and how it can change national diplomacy. In addition, Ross offers advice to global innovators, stressing quality time management, effective hiring practices, the mutual benefits of mentoring, and assertive risk practices.

Transcript

This guy is really special. He went to Northwestern. I know that. I remember that part much. He was a part of Teach for America, which maybe some of you students are thinking about, and I hope he'll talk about a little bit about it today because that is an incredible organization. He also started another organization called One Economy -- did I get that right? -- in 2000 that was highly successful, that I hope he'll talk about as well. But in the '06-'08 timeframe, he was essentially President Obama's technology guru, and I got that right off Wikipedia so it must be true. He pulled together all the folks that were advising the then-candidate Obama on his technology, innovation, and entrepreneurship agenda. He has been, since early April of 2009, the Special Adviser on Innovation for Sec. Clinton in the State Department which, if I go this right, last year -- this will blow your mind -- 65,000 employees, if I remember that number correctly, 65,000 employees.

So we have one of them here, and we probably could find out where Sec. Clinton is today so we know where two of you are today. So without further ado, let's make a special welcome to someone who truly is an entrepreneurial thinker inside this administration, Alec Ross. Thank you. Thank you, Tom, and thank you all for coming out on a beautiful May afternoon in Palo Alto. For you all to come in on a May afternoon in Palo Alto, I think, is humbling because I was wandering around campus before this and I had to coax myself to go back to work. It's exciting to be able to speak with you all this afternoon. When I was asked to give this talk by Tom Byers, he said, "Think about the advice that you'd like to give to the next generation of leaders and entrepreneurs." And for me, that was sort of an irresistible offer. I'll talk a little bit about my own personal story and some of what I did going into government and some of what I'm now doing in public service. But I want to spend the bulk of the time just sharing four lessons with you.

First, manage time like you manage your money. Two, hire true believers. Three, stay connected. And four, stay out of the gray twilight. I'll come back to these four later. But first, I wanted to give a little bit of a background to my history as an entrepreneur outside of government and now, inside government. As Tom Byers mentioned, when I first got out of school at the age of many of you, I became a middle school teacher in West Baltimore through a program called Teach for America. And at this point, this was the early '90s, this was a pre-Internet Explorer, pre-broadband, pre-mass use of the Internet. And one of the things that I saw when I was teaching these middle schoolers in one of the poorest, most violent communities in America -- this is a community, at the height of the crack wars, was a virtual battlefield for these young people. One of the things that I saw in my incredibly overcrowded classroom -- I mean this is a beautiful amphitheater that probably holds 100-150 people.

If there were this much space at Booker T. Washington Middle School where I was a teacher, they'd try to cram 500 students into it. They have a little classroom the size of your thumb where I taught 37-38 middle school students who were just jumping beans in terms of their interest to move around and get out of their little seats, and be able to really connect and engage educationally. And the one place where I saw those young people really be able to learn the way that they were

supposed to learn, as opposed to being stacked into a classroom and learning out of 30-year-old textbooks, was when they used technology. And I saw initially that one time in the week when we would march down to the computer lab for an hour a week. And one of the things that I saw with these young people in the computer lab and using technology to use self-paced learning, was that there was something incredibly intuitive about the use of technology among that generation of young people. And for those of you who are seniors in college now, MBA students, you probably would have been about the age of my sixth graders then. And I thought, as this was taking place again in the early '90s in a period of the massive de-industrialization of the economy, the loss of America's manufacturing base, a time at which people could no longer count on making a Union wage job working at a poor, working at a mill, working at a factory. It was at this time that the American economy was basically splitting into two. On the one hand, increasingly technology-rich knowledge based jobs; on the other hand, instead of those good old jobs that the poor, the middle and the factory, people were having to go into the service industry jobs.

And more often than not, mom and dad having to take these service industry jobs, take not one but two of them, four jobs then between a husband and a wife and not a health insurance plan between them. And so what I and some buddies say at that time with the changing nature of the economy, sort of the rise of technology, was that hey, this was an opportunity for people from historically low-income and working class communities to enter the economic mainstream. If it's the case that it doesn't matter how much money is in your wallet, or how much melanin is in your skin, that the use of technology is incredibly intuitive regardless; if you are a young person, then that's an asset that you can build on to help people enter the economic mainstream and compete and succeed in our technology-rich and knowledge-based economy. So after my history, after my time as an inner-city school teacher, I and three friends started a non-profit in a basement called One Economy. And if I knew then what I knew now, I wouldn't have bothered starting it. And if I had, I would have been incredibly unsuccessful. So something about being a 20-something year-old naive hopeful individual that allowed me and my colleagues to become successful, and I'll get to the why of that a little bit later. And we built that non-profit with the mission to maximize the potential of technology to help people of low incomes enter the economic mainstream. And we grew from being four people in a basement to the world's largest digital-divide organization, eventually helping more than 20 million people in more than 10 countries on four continents, use technology to get the skills that they needed to live better lives. And I did that for a period of 8, 9,10 years and one of the things toward the end of that period that I saw was there was this extraordinary member of the United States Senate who, through his own personal and professional roots in the south side of Chicago.

And I saw in this man, Barack Obama, that he got it. He truly got how technology could be a difference-maker in the lives of America's low income and working class communities. And I was so fortunate, as Tom mentioned, to work amidst a great many people to help build a technology and innovation agenda for then-Senator Obama's presidential campaign which then propelled me into government service. And what I'm doing now, as Secretary of State Hillary Clinton's Senior Adviser for Innovation. And to speak very briefly about what we're doing at the State Department. First of all, we're having an enormous amount of fun. One of the real gifts of public service for me is getting to work for Secretary of State Hillary Clinton. She is a truly muscular Secretary of State. She's very, very good at her job. And one of the things that she did upon becoming Secretary of State was create an innovation agenda for America's foreign policy.

If you think about foreign policy, a lot of the time you might think about the formal interactions between sovereign states as conducted by diplomats over mahogany tables with flags in the background. And one of the things that Hillary Clinton said was, "Yes, diplomacy oftentimes involves the formal interactions between sovereign states with the flag flying at the background." But what she said is that not all of our diplomacy needs to be conducted government-to-government. But by using the tools of the 21st century, we can now engage government-to-people, people-to-people, and people-to-government. How can we connect and engage with the wider world in ways that we previously hadn't? And if you think for a moment about some of our recent political history, a lot of the people -- and as I travel around the world, I kept hearing the United States' foreign policy described as overpowering: the United States trying to overpower its interlocutors around the world. And one of the things about Secretary of State Clinton is that she is now very much focused on empowerment, empowering versus overpowering. And technology for, which I'm sure this is intuitive to you and for everybody else 20 miles north and south of here in Silicon Valley, everybody knows the role that technology can play in empowerment. And so very few initiatives that we focused on using technology is something that can be empowering and can get people engaged in diplomacy and development in ways that weren't the case historically. One example: In the hours after the earthquake in Haiti, there are these fantastic women who worked in the innovation space at the State Department. And they got the idea in the hours that followed the earthquake that, "Hey, tomorrow morning when people wake up and are having their morning coffee and they heard about what happened in Haiti, we should be able to do something so that those people hearing about this for the first time over that morning cup of coffee can do something right then." And so what they did is they worked with the private sector at the secretary's direction to immediately stand up a program so that people who texted the word Haiti to a short code 90999 could donate $10 for earthquake relief. And at the time, we thought, "Hey, maybe we'll raise a couple hundred-thousand dollars if everything breaks right, Wow, we might be able to raise $1 million and that would be of a truly historic nature." And what happened was this campaign became viral over social media, over the Twittersphere and social media space, and other social media spaces.

And once it became viral, in the days immediately after the campaign in social media spaces, it was then adopted by the

mainstream media. And eventually, more than three million Americans chose to use their cell phones to make a $10 donation, and more than $30 million was raised for earthquake relief in Haiti. Another example of the kind of 21st century State-craft that Secretary Clinton is leading is an example south of our border here, in Mexico. As I'm sure many of you are all too familiar with, the drug cartel-fueled violence in Mexico is completely out of control. It's a disaster. Far too many people are dying, especially at border towns like Ciudad Juarez. And one of the things that the Secretary of State and our Ambassador to Mexico, Carlos Pascual, said is, "We need to take a new and innovative approach for this. Let's get some people from Silicon Valley to help us to think through in creative ways what we could do differently, what is something new we could do." And so I and others were deployed down to Mexico to meet with the President's cabinet, meet with the people like Carlos Slim, to meet with leaders from civil society. And our goal was to come back with one idea that could help reduce crime in Mexico. And so we came up with a program that is likely going to launch some time in the fall, based on what we learned down there, which was that the Mexican citizens themselves will no longer report crime, by and large, because they are afraid if they walk up the literal or proverbial steps of the station house to report crime, they are going to get found out and will therefore be in danger.

One of the things we learned while we were down there is that everybody, even in the lowest income barrios and places like Ciudad Juarez, they all have cell phones and they text message like crazy. So we've set up a program where people are going to be able to anonymously text message, and I could explain how that works but that's not the best use of this time. Just take for granted I am telling the truth, people will be able to anonymously text message crime reports that will then compel the security forces to be onsite within 10 minutes. So what we're trying to do with this program is to restore anonymity, transparency, and accountability back into crime fighting in Mexico. And we don't yet know if that will work, just like when we launched the Text Haiti program, we didn't know what the results for that would be, but we're very hopeful. So these are just two very quick examples of the kinds of things that we're trying to do in very innovative and very non-traditional way in sort of the fussy old world of diplomacy. But I wanted to sort of turn to the lessons that I've learned having been an entrepreneur, having built an organization from a basement into a pretty successful global organization. And having been part of a campaign that really went up from startup mode, to helping revolutionize the way that people thought about innovation policy and how campaigns are run, and to now, in the State Department thinking how innovation can help change diplomacy. And those four again are: Manage time like you manage money; hire true believers, stay connected, and stay out of the gray twilight. So briefly on each of this.

Number one, manage time like you manage money. So think about the amount of effort that entrepreneurs spend thinking about the allocation of capital, and the effort that they put into managing their money. That and building their product are the two most important things that they do, right? Well, one lesson that I have learned that I think any entrepreneur must learn if she or he is going to be successful is that just as important as managing your capital is managing your time. And this is something that took me a long time to get right. From age 22 to about 30, it was something that I struggled with. And I used to go through this exercise beginning when I was about 30 where I would take my calendar out and I would look at what I was doing six months ago or nine months ago, and I would literally go day-by-day and appointment-by-appointment and see what I was doing, and it made me want to crawl into a fetal position. To see all of these things that I thought were worthwhile and important and worth doing at the time, and to realize that, my gosh, I spent a lot of time working at things that ended up just being losses. And so what I would argue to you is that as much time as you put and as much effort as you put into figuring out how you are going to manage your capital, become similarly focused and similarly ruthless about how you manage your time, because just as dollars drain out of your checking account, so to does time pass. And time is one of the most precious resources for an entrepreneur. Number two, hire true believers.

There are a lot of smart people, and there are certainly a lot of smart people in Silicon Valley. And one of the things that I've come to believe is that as people are building their teams, entirely too much emphasis is placed on sort of the conventional notion of what appropriate qualifications are. "Oh, this person has a Master's from this school. Let's hire him instead of the person who has a Master's from this school which isn't quite as good." "Oh, this person has 10 years experience, as opposed to this person's five years experience." I think that that is a wildly overrated measurement for how to build your team. Certainly as companies go from being big to being really big, I would argue that that's an appropriate time to really get very deep into the skill sets that you are trying to build. But if you're an early-stage company - looking out among this audience and seeing a lot of aspiring entrepreneurs, what I would counsel you to do is focus on hiring people who would run through a brick wall, who are true believers in the mission of the organization's product or service. Because even if somebody is not as smart as another applicant, even if somebody isn't necessarily as well qualified as another applicant, in my own experience, it's people who have the will and hunger to succeed that more likely than not are going to be the ones who end up becoming most successful. And I repeatedly see this happening. And what is interesting is that five years after the fact, everybody presumes that they are the smartest, most talented, most experienced people. But especially when you are building a business, the thing that I would most measure is not necessarily the amount of experience or even the IQ of the person who you are evaluating, but the level of passion that they are going to bring.

Number three, stay connected. What do I mean by that? So I'm at this really weird point of my career where a lot of my peers are suddenly very important and very powerful. And it's been very interesting for me to see them and others as people

ascend in their career, the degree to which people stop engaging with young innovators, the younger people. I think there's a lot of earnestness among young entrepreneurs, among people who are newly successful to say, "Oh, I want to stay connected. I want to mentor young people. I want to make sure I keep it real and stay grounded and pay attention to the innovations that are taking place in the proverbial garages." And what oftentimes happens is that only lives rhetorically, I would argue among most successful people. And I have absolutely no doubt, by virtue of the educations that many of you are getting right now, that you will be successful. And what I think is going to be interesting for many of you is once you are successful, do you focus all of your attention on managing up, getting to know more similarly successful and impressive people, and staying amidst them? Or can you, will you stay grounded make it a priority to stay with young people and young innovators? In Silicon Valley, there are many one-hit wonders. There are many people who have had enjoyed success one time. I would argue that people who have founded and built two great companies, what oftentimes distinguishes the entrepreneurs who has built two great companies versus one great company, is that that person who has built two great companies has managed to keep conversations going, has managed to stay connected with people who are no longer their peers.

And if you even think about the conference circuits, if you think about this social milieu that people who are suddenly powerful, who are suddenly rich are pulled into, it distances you from young innovators. And I would argue that people who mindfully or less mindfully isolate themselves from young people and from young innovators, are more likely than not, not going to have that second big success. And the fourth piece of advice that I wanted to pass along before opening this up to questions and answers, is to stay out of the gray twilight. What do I mean by that? So there is a sentence or there is a line by Theodore Roosevelt that I'll repeat that's the third most important sentence that I've ever read in my life. The first two were written by my wife. Number one was 'I love you.' Number two was 'I'm pregnant.' So my piece of advice to you goes to number three. And Theodore Roosevelt in 1899 said, "Far better to dare mighty things, to win glorious triumphs even though checkered by defeat, than to rank with those poor spirits who neither enjoy much nor suffer much because they live in the gray twilight that knows not victory nor defeat." And I would argue that there is a lot of gray twilight out there. There is a lot of comfort to be had by people getting good jobs, by a wariness to take the bold step and to dare mighty deeds and to win glorious triumphs, but then to have similarly big failures. And what I've learned is that failure isn't the end of the world and in fact, it makes you a lot stronger. And I think that success in this world has to do with the spirit of audacity.

You've got to be audacious and not care so much if you win or lose or to fling yourself into things, mind, body and soul. And more likely than not, even if you lose, you're going to have fun and you're going to learn from it. And the people who I've gotten to know who are now several steps past you and your lives. People who are in my age bracket, in their mid- and late-30s, people in their 40s and people in their 50s. If you ask them, oftentimes what it is that they regretted is that they regretted not taking up those big chances. So the last piece of advice that I'll give to you just as many of you begin you careers is stay out of the gray twilight. And with that, I'm happy to take some questions for the next 20 minutes or so. Yes? Yes? I'll give you a couple of soft balls to start off with. Can you talk about the complications of dealing with China on technology and Internet policy, given the many sides of US relations with China? And number two is, people like Howard Schmidt and the report out of -- I can't remember if it's the National Science Foundation or the National Academies -- people who ostensibly know what they are talking about -- say that it's an open secret that the US has developed offensive cyber-warfare capabilities. I feel like I'm back in Washington with the Diplomatic Press Corps, so let me answer that.

So in terms... It's a really bad idea that they're secret because that is a sure way to lose and it's not democratic. So I feel like I'm in the Brady Press Room. So let me answer that. So in terms of our interactions with China on cyber policy, this is something where the secretary obviously has been very plain-spoken. There is an issue called Internet Freedom, which we define to mean the freedom to access the Internet, the websites of one's choosing, and each other. And Internet freedom, which we take for granted in a place like Palo Alto, that the web is built on this end-user to end-user principle, that anybody can connect to whomever they want without intermediation in the middle of that. That's what allows people to communicate and collaborate in real time. It's what allows capital to flow with the click of a mouse. But it's increasingly the case that that isn't true around the world.

And as I've said in the past, 2009 was the worst year in history in terms of Internet freedom. While countries like Iran and China get all of the attention on this issue, and while they suck up all the oxygen, one of the things that I think is very important to understand and be aware of is that there are actually now dozens of countries from Thailand, to Turkey, to Vietnam and many, many others who now view the Internet as something that can be censored, something that can be built on something other than the end-user to end-user principle that so many of us, and certainly everybody here in Silicon Valley cherishes. And so in terms of our engagement with the Chinese, we've been very forward with them about some of the difference we have had on this issue. The Secretary of State gave a paradigm-shifting speech on January 21st, where she spoke bluntly to some of the differences that we have with the Chinese on this. I will say that the demographics are destiny. There are about 400 million Chinese online, right now, 200 million of whom are under the age of 25. And if I had to guess, I would guess that those 200 million Chinese under 25 who are currently online, that number is going to grow far larger. And I bet that the push from that demographic, particularly as it grows older and as it gets more empowered, it, too, will demand from its government the ability to access an uncensored Internet. As to the second point in your question, I'm not going to comment about any comments that

other government officials have made. I'll let Mr.

Schmidt speak for himself. Yes, Tina. So you talk about the value of taking on big audacious goals and the ability to fail. Have you had any big failures that you've learned from an experienced? I haven't had any failures where like my company failed. Certainly, there were initiatives at my non-profit that we thought were going to be a big deal that just thudded. It's really interesting, the degree to which things that you think are going to be successful fizzle, and some of the things that you think are promising turned out to be big. So just like the example that I used with the Text Haiti example, there's an example of something I think we had modest hopes for what it could do. But it turned out to have this big impact. And what it's now doing far more significantly than just the $35 million that Red Cross now has to do earthquake relief, is little non-profits all around the country are saying, "Hey, maybe we can't raise $35 million in $10 increments over cell phones but maybe we can raise $35,000." So it's interesting if you think -- you all are too young to be at this point yet, but for myself and many others, we're used to getting things by snail mail from charities, with sort of the heartfelt letter and the return address where they ask for $25. The interesting impact of the Text Haiti program is that now it's encouraging charities to rethink that model and think about how they can do mobile-giving programs.

Yes, in the back. What do you think is the greatest obstacle to creating innovative change in governments and is one sector of government more innovative or more accessible to innovation than others? Yeah, that's a great question. I think that there are a couple of big inhibitors to innovation in government. One is statute and regulation. So what that means is there are basically the rules that we have to follow. When I was at my non-profit, if I wanted to hire a particular web design firm because I though they were the best web design firm, I could hire them. Now, if we want to hire a web designer, we have to go through an elaborately formal process which, more often than not, means that we can hire somebody in six months, who has five people whom they can dedicate to filling out an application, who may not be the best to do the job, but who is the lowest bidder. So the way the system is set up to not always be able to move fast and not be able to be flexible, and I would argue it actually prejudices against smaller companies and more innovative companies, that's one. Challenge number two is you've got to have support at the top of these organizations to sort of force innovation and change through a bureaucracy. So in my case, I've been very lucky.

First, my association with the Obama campaign, in that case, we had a candidate and we had campaign leadership that was very supportive first from a policy area which was what I worked on, being very innovative and aggressive in terms of our technology and innovation policies. But secondly, thinking about they were very supportive from the top about how technology can revolutionize campaigning. Now at the State Department, the Secretary of State is really the godmother of 21st century state-craft. And she, above anybody else, has been aggressive, and smart, and supportive of how innovation can be integrated to our state-craft. If you take her out of the equation, like if she's not Secretary of State, I and my colleagues would have enjoyed 10% of the success that we did over the past year. So you've got to have that leadership from the top driving this. And that's not universally the case. It's not always the case that you have somebody at the top of an organization who is saying, "I get it. I want to drive this. Let's push this hard.

" Yes. Yes, ma'am. Have you looked for other ways of innovation in foreign policies than technology? I'm sorry. Say that again. Have you looked for other ways of innovation in foreign policy than those using technology? That is or is not... Institutional innovations or something like that. ...is not using technology. Yes, so it's interesting. Innovation, obviously, is something that is about much more than technology. I'll give you one example.

One of the things that we're trying to do in the innovation space that isn't technology-specific is aid coordination. Now, that is not at all a sexy topic but it's actually incredibly important. And it's interesting. I was in the Democratic Republic of Congo about six months ago. And it was a fascinating experience. The Democratic Republic of Congo is one of the poorest places on earth. It has a per capita GDP of $184 per person per year, so literally 50 cents of economic output per person per year. And it has this horrible history of colonialism and of outside interference inside the country. And I was there and amidst the poverty and amidst the squalor and amidst the violence that was there. There were a whole host of philanthropic efforts from the United States government, from the British government, from the Belgian government, from the EU, and then from big foundations, and then from wealthy individuals.

And none of it was connected in a way that made any sense whatsoever. And so one of the innovations that we're trying to bring into our development policies by way of illustration, is thinking about how to do aid coordination in a new and different way. And again, that's not terribly sexy, but if you're looking at something that can actually be particularly meaningful, it would be good. And especially if you think about it transnationally. So the United States and the Chinese, for example have very different development policies in Africa. China, oftentimes, is very focused on big infrastructure projects and the United States, historically, has been focused on the provision of service. So the Chinese are building roads and we're helping support hospitals and healthcare networks. And so just one very...it seems obvious but it's not anything that we've done, is say to the Chinese, "Hey, let's make sure that we build our hospitals where you're building your roads." It seems incredibly obvious but decades have passed without coordination. So there's one example. Other questions, yes.

Since you arrived at the State Department following Condoleezza Rice's departure, has there been a devolution or a revolution within the State Department with respect to technology? Yeah, that's a great question. And it's going to sound like a cop out but it has the virtue of being true, both. So let me give some history to this. I would argue that what has happened since Secretary of State Clinton became Secretary of State, has been revolutionary in nature, and spectacular in terms of very fast impact. However, the roots for this, I would argue, actually go back to the beginning of 2008. There's an interesting story. 21st century state-craft as we think about it, really has its origins in February of 2008 where a Stanford graduate, a guy named Jared Cohen -- most of you since you are still in school, I don't know if you're getting Stanford Magazine yet. But if you are, there's an article about my colleague Jared in there. One of the things that happened in February of 2008 was there was this movement, A Million Voices Against FARC -- the FARC terrorist organization in Colombia. There were demonstrations by 12 million people in 190 different cities around the world.

And following these demonstrations, the FARC saw more demobilizations in a couple of weeks than had happened in the previous decade in terms of military action. And so the State Department was like, "How did this happen? Who is the leader? Who is behind all this?" And so what they learned was that it was largely leaderless, that it was started by an unemployed engineer in Colombia named Oscar Morales who just set up a page, A Million Voices Against FARC. And what was interesting is that this young Stanford graduate, he's 28 years old now, went down to Colombia, and he really began to investigate at that point the intersection between social media and foreign policy. And so what then happened over the course of 2008 was a growing recognition within the State Department, and the beginning of an understanding of the role of connection technologies in our foreign policy. And then when Hillary Clinton became Secretary of State, then boom, it sort of exploded and she began to allocate resources to it. And things like A Million Voices Against FARC, which is relatively recent, just a little over two years ago, now, that dynamic is commonplace. Yeah. So you spoke a little bit earlier about empowerment. So I was wondering what the State Department is doing to help stimulate innovation in Third World countries if an entrepreneur there has a really great idea? That's a great question. So a couple of examples.

One is Pres. Obama has convened a summit in April focused on entrepreneurship in Muslim communities. And I think that's a good model. So if you think about environments that are prone to radicalization, they oftentimes are places in the Third World with high concentrations of poverty. And thinking in this case about what we could do in Muslim communities, one of the things that we realized that we could do that would have the greatest impact is foster entrepreneurship. And so it's a very practical matter: What do we have to offer? We have money, we have tools, and we have people, and so the key for us to put all three to work. So in terms of money, a lot of what we're doing is focusing our development agenda in places using market-based instruments to foster entrepreneurship in some experimental ways, taking some kinds of chances that historically haven't been the case. There is this thing called the Overseas Private Investment Corporation, OPIC. And for this initiative that's focused on Muslim communities and Muslim entrepreneurship, they're dedicating, I think it's literally a couple-hundred million dollars in debt and equity financing into places where historically and into entrepreneurs where, historically, the United States government just wouldn't have put money in there. So that's one thing.

Another thing is a focus on what are those things that could be done to support innovation and entrepreneurship given sort of the new layer of personal infrastructure that exists in the developing world. In my first day of work in April of 2009, there are an estimated 4.1 billion mobile handsets on the planet. Today, a little over a year later, there are 4.7-4.8 billion mobile handsets on the planet. So literally in just one year, there has been a more than 10% increase, and with that increase of more than a half a billion handsets, 75% of those are in the developing world. So the challenge that we are putting to ourselves right now is, OK, if we are not past the tipping point, it's sort of like we're tipping in the tipping point right now, where people in the Congo, and people in Malawi, people in Bangladesh, people the world around, even people of low incomes have access to increasingly powerful smart phones, how can that be used to do more than make phone calls? And so it's sort of chapter one, page one. Right now where we are, our USAID administrator has only been in place for a handful of months. I mean that is really the development wing of the American government. So what there is right now is there is a big strategy being developed through what we call in bureaucratic-speak, the Quadrennial Diplomatic and Development Review. What that means is figuring out where our money and efforts are going to go for the next four years. And this is a big chunk of it, is to say what are things that we can do that are empowering, that are based on this personal infrastructure that most people now have riding on their belts.

Couple of last questions, Chris Peacock. How can a big far-flung organization like State, how do you get people to think about innovation without going outside and saying, "Here I am." Well, it's interesting. Part of it is just use the tools of the digital age. So for example, this lecture I'm giving. I could look out and say I am giving it to about 100 people, but I'm told that the podcast will reach about 10,000. It sounds trite, but part of it is trying to figure how can you use digital communications to reach people at the embassy in Angola, at the embassy in Bangladesh, at the embassy in Vietnam who couldn't necessarily sit in the auditorium of 21st and C St. in Washington, D.C. So that's Thing One. The second thing is the State Department and foreign policy generally is still a hierarchical place. And so what the Secretary of State says and does matters a lot.

People are still used to hearing things from the top, and then integrating that into their life because they have heard it from the top. And so another way we do it is -- this is something that the Secretary has made a priority of and she talks about it. So

when she goes to places, she talks about the value and virtue of innovation and what she is personally doing and the State Department is doing to support it. So that's important. In the terms of how that thing can be transferred, because this shouldn't all be just about what's in the best interest of the United States but what's in the best interest of the world around. So when she sits down with her peers in a bilateral or multilateral setting, she now raises this issue. She talks about innovation. It now seems to many people like a long time ago, but when we all came into government, the financial crisis was something that -- it didn't matter that we were working in foreign policy. It was still something that was completely upending all of our point of view. And one of the things that the President recognized and which we are trying to now be supportive of in our foreign policy, is that if we are going to regain the kind of global prosperity that we want and need, it's not going to be because of asset building in real estate.

It's not going to be because of some fancy new financial instruments. It's going to be because of innovation. It's going to be because people have built new things, built new products, built new processes that create value, that help people live better, healthier, wealthier lives than they did before. So innovation, forgetting about our foreign policy for a moment, innovation is really at the core of our economic future. And so that's something that the president has prioritized and the Secretary of State is doing it. And so that's another big push here and even though the economy is improving right now, to not forget about that as we try to steward smart economic policies. Yes. One more. I have a question about the topic of creating value and being innovative about Teach for America, about your experience there. I've heard a lot of educational bigwigs.

the bigwigs in educational policy, criticize Teach for America for employing under-qualified candidates for periods of time that are too short for them to make an actual lasting difference to the communities that they choose to serve. And so I wanted to know if you agree with this perspective, and if you did or did not, what kind of reforms Teach for America could institute to observe the fundamental integrity and value of the program whilst making the best of their applicant pool which is very talented, youthful, and energized? Yes, so let me answer that in two ways. Number one, that assertion is factually inaccurate. So there's actual data, and data actually tells a pretty good story. And so if you actually look at studies that show first-year teachers going into the specific kinds of environment that Teach for America teachers are going into, what you now see is that the retention levels are oftentimes are equal to or better than traditionally trained first-year teachers who go into these kinds of schools. So that's Thing One. So I think that that assertion is oftentimes made by education professionals who resent the innovation oftentimes, this sort of the non-traditional point of origin of Teach for America. The second way that I would answer this is by saying even among those teachers who do leave the classroom, a lot of what they do, again looking at the data, a lot of what they do, even if they are not in the classroom anymore, they are still doing things that are very focused on education and underprivileged environments. So I, for example, I left the classroom and what I chose to do was start a non-profit, the purpose of which was to help kids growing up in poor communities. And that's a trend that I and the research increasingly shows, which is that even as Teach for America teachers who are leaving the classroom, historically, maybe these people would have gone to Goldman-Sachs or to MacKenzie or any of a variety of other things.

And there's nothing wrong with any of that. But a huge percentage of those people are becoming assistant principals, they're becoming principals, they're going into think-tanks. They are becoming lawyers but they are becoming public-interest lawyers. Or like me, they start a non-profit then they go to public service. I think I've got time for one more question. Yes. So it's sort of related. Can you talk a little bit about the policies of State regarding innovation or encouraging innovation in the education sector? Yes, so when you say, "In the state," do you mean at the State Department specifically? Yeah. Yeah, so the State Department is not the historic locus for education policy within the American government. But I will point out two things.

Number one, what's happening right now at the US Department of Education, under the leadership of Secretary of Education Arnie Duncan, is pretty remarkable. And I've read something recently where it described what Pres. Obama and Secretary of Education Duncan are doing is very similar to what Richard Nixon did, sort of opening the gates into China. It took a staunch anti-Communist like Richard Nixon to have the credibility to be able to open up our relations to China. So it took an urban superintendent like Arnie Duncan and somebody who had as obvious a commitment to urban education as Barack Obama to say, "You know what? This is a problem that involves more than just adding dollars to it. Let's take away the firewall that exists between students' educational performance and teacher evaluation." That might seem obvious to a smart young person like yourself but that historically has been a firewall that you absolutely couldn't cross. In terms of the State Department, and in terms of the United States' role promulgating policies like that abroad, I think this is a case where a little bit of humility is called for. Nobody is a prouder American than I am and I'll beat my chest about all those things that I think we do best, and that I think we can do to empower citizens the world around. But you know what? I think we can learn a thing or two about math education ourselves from people in Singapore. I think we can learn a lot about public education from public education systems from outside the United States.

So while I and while we as Americans, I think we have a unique and important role given our global leadership, to assert ourselves in a variety of ways. I also think that on a couple of things, a little bit of humility is called for. And while I think that Pres. Obama and Secretary of Education Duncan are doing spectacular things, before we get on our high horse and start evangelizing for the way that America does public education, I'm personally of the point of view that we're still on a good point

that we could do a little bit more listening than talking. So with that, thank you all.