CELEBRATING 25 YEARS WITH THE SHORENSTEIN CENTER

EXPLORING: THE MEDIA AND POLITICS FRONTIER

UNEDITED TRANSCRIPT

Friday
October 14, 2011

Nye Conference Center
Taubman Building, Fifth Floor
Harvard Kennedy School

(9:12 a.m.)

MR. JONES: I want to welcome you all back, those of you who were with us last night and those of you who are just joining us today. We feel that we have a great program for you today and one that we want to take full advantage of. As you can see there is a certain sentimental, an old haunt, someone who is back with us on this 25th anniversary. I'm Alex Jones, Director of the Shorenstein Center and it is my great pleasure to welcome you to this day and a half of conversations is the way we framed it. It is going to be thinking out loud as much as anything. It is going to be with your participation, we eagerly hope.

When we were deciding what kind of a format we wanted for the 25th, something very special, we wanted it to be really interesting and we wanted it not to be something that would be pro forma, et al. So we began with the idea of what is the best way to sort of elicit information and thoughts that are interesting and fresh and challenging. And that is the one on one conversation, I think that is sort of the journalistic golden mean. But you have to have the right people asking the questions and they need to be asking the questions of people who are really worth listening to.

So we began with a group of people that we invited to be effectively interviewers, to initiate the conversation, the one on one conversation with then a group of people that we, with our interviewers, helped choose. And we went to great lengths and took great effort to pick a stellar group of both and I think you will agree that we succeeded in that. We wanted to lead off today with Ken Auletta. Ken is an old friend of the Shorenstein Center. Ken has interviewed, I think, 22,000 people in perhaps the last 24 hours, I don't know.

(Laughter)

MR. JONES: He is a superb journalist who has written many books, many of them focused on this new world aborning, that has been aborning and Ken has been tracking it for his Annals of Communication Series at *The New Yorker* for a long time. He is, as I say, a friend of the Shorenstein Center and exemplary journalist and we will leave it to our interviewers. I will introduce the interviewers, but the interviewers will introduce their partners. They will speak together for about 30 minutes or so and then we will open it to questions. As I think I said last night we are streaming this live. When you ask questions, if you would, identify yourselves and things like that. It's pretty standard things in that respect, but we believe it will be anything but standard in terms of the content of the day.

Ken Auletta and Vivek Kundra.

(Applause)

MR. AULETTA: Good morning. So the gentleman sitting to my left learned to speak Swahili before he learned English, which was actually a very good preparation for understanding the language of government. So was a degree in psychology. You also got a master's degree, Vivek Kundra, in information technology and he set out to improve the way government performed. And try to craft a common language so the people would understand what was going on in government. He did this first for Arlington County, Virginia. Then as Cabinet Secretary for Governor Tim Kaine of Virginia, then as Chief Technology Officer for the District of Columbia, then as President Obama's Chief Information Officer overseeing and monitoring technology.

The United States spends 80 billion dollars a year on information technology, which is more than any government in the world. He also established something which is actually I had not known about before this week, which was data.gov, which is an incredible

resource of government data and much more efficient than, say, a Google search is for what is going on. He left the government this past August to come here, where he is a fellow at both the Berkman and Shorenstein Centers. And his task is to explore how the democratization of information impacts journalism. So let me begin our conversation by giving you a new job. I have now anointed you publisher of the *Boston Globe*.

(Laughter)

MR. AULETTA: Tough job but someone has got to do it. You're losing money. How much, by the way? Gotcha. So tell us how you would use technology to improve the economic performance of your newspaper.

MR. KUNDRA: Well, first I think the key is going to be to look at sort of the emerging trends that we are seeing in broader society in terms of how people are actually accessing information. My view is that a lot of companies, in journalism specifically, they are still so wedded to the old model of how things used to work when the world underneath them is fundamentally shifting. How people are accessing information on their mobile devices, the social grid in terms of how people are actually communicating and sharing stories, not just around their local jurisdiction, but globally for that matter.

And third is looking at the phenomenon in terms of all the hyper-local content information that is being generated. So in each of those areas I would try to figure out how do you innovate, almost look at it as a venture capitalist. So at the local, sort of hyper-local level, really incentivize and create a whole new set of journalists who are going to be able to slice and dice and cube information that is emerging from whether it's government institutions, from police departments that cover crime stories to breakthroughs that are happening in terms of scientific discoveries with state institutions and try to figure out how they actually build stories that are going to be evergreen, not just a point in time.

And then figure out how do you take these stories--

MR. AULETTA: Just digress a second. Explain what you mean by evergreen.

MR. KUNDRA: So right now if you look at most journalism, most stories you read, I have always wondered why they ever end, especially stories that are powered with data. So for example, if you look at schools, everybody knows that in September most parents are trying to figure out if they are moving, which school they are going to send their children to

or if they are in the same region how their school is performing. Yet what you notice is an ordinate amount of resources are spent doing the same thing over and over again. It's almost like directing the same movie, but starting all over again. What if you could take the data that is coming out of the schools, or for that matter crime stories, data that is coming out of police departments and say, you know what, in the same way that we've got these dashboards that allow us to monitor the performance of whether it's weather or the stock market, why isn't news treated the same way?

Why can't we have these stories that are evergreen so we can actually monitor on a real time basis the performance of content rather than trying to throw more bodies at the problem. So there is a technology solution to some of these issues. And then the key, I think the winner in this space is going to be the set of organizations that are going to be able to take immense amounts of data that is being generated across the board and slice and dice and cube it and turn noise into signal. So think about all of us sitting here today and people watching. We are almost like censors, right? We've got a camera, we've got our cell phone, we're tweeting, we are sharing our social experiences.

But very few people are able to take that organization and actually turn it into meaningful insight. And those that are going to be the winners, if you think about it from a hierarchical perspective in terms of paradigm, at the very bottom of the paradigm you've got vast amounts of data that turns into some key performance indicators that then turns into insight. It's the insight, I think, that needs to be looked at. And that's why I think news organizations can add tremendous value by bringing the narrative capabilities in terms of the content that is being generated.

MR. AULETTA: And what about, how would you advise the *Globe* to use social networks like Facebook and Twitter? How could they tap into them to make their business better?

MR. KUNDRA: Well it's a great platform if you think about it to amplify good content, right? It's not -- I don't necessarily see that Facebook somehow is fundamentally changing the social media, the news business, per se, but if you look at a lot of the stories that travel around, they are basically pointers to great content. If you are able to generate great

content, the deeper question is well how do you produce that amazing insight. So look at Twitter, look at Facebook, look at YouTube. They are essentially amplifying a lot of that.

And if you look at these companies that have been created why have they become these multi-billion dollar companies? Facebook, Twitter, YouTube, what's amazing about all three of them is that they haven't created a single thing. They've relied on people to upload content. It's people like you and I who are uploading content on YouTube or Facebook or Twitter. They've built a platform. And the key is how do you leverage that platform to amplify your content, your insights.

MR. AULETTA: But I have a problem in that I'm a newspaper and I want to migrate to an online newspaper and charge for it as *The New York Times,* the *Globe* and others are starting to do with some modest success in some of them, certainly *The New York Times* has had some success. And yet the problem is that I can't get advertisers to pay. They pay basically a tenth for the same ad online as they pay for that ad in the newspaper. So how do you pitch me as an advertiser that you are not paying enough, that online, the narratives you speak of and the data and the richness of that data in fact is so valuable that I should be paying more.

MR. KUNDRA: Well, so let's look at the economic in terms of why are advertisers paying more for whether it's Google or Facebook, right? So the big battle in the tech industry right now, sort of Google versus Facebook, is who is going to get more eyeballs and what is the conversion rate when it comes to some of these ads. What's really, really interesting in terms of looking at the social grid is that people are more likely to buy a product, so to speak, or believe a news story if it's coming from somebody they know versus if they just find it on a search engine.

The big dilemma for Google right now and why Google is going aggressively after the whole Google+ model in terms of social sites is because they recognize that. So advertisers know that if there is an ad on Facebook people are much more likely to buy a product than if they just see it on a Google search result. So the same way when it comes to stories it's figuring out how do you make sure that those stories become viral. And it all begins. There is no substitute for great content. Because the content that does become viral

is content that is great. So how do you look at that economic model and say, well, these platforms essentially are redirecting a lot of those stories.

It's not like when Facebook shares a story from *The New Yorker*, it's just in Facebook. They click and the move onto *The New Yorker.* So it's sort of the chicken and egg type of question which is how do you create really, really amazing content that then can be amplified?

MR. AULETTA: So you have had almost two months here as a Fellow. And you're studying democratization of information and how it might impact journalism. What are some early lessons you've found?

MR. KUNDRA: So what I've found interestingly is there is some amazing work happening all over the world. For example, in France there is a magazine and they are trying to figure out, well, how did it create news stories that investigative journalism, rather than hiring an army of people in terms of thinking about a problem around water supply and the disparity as far as cost. So what is happening is utilities were charging different prices, even with houses that may be right next to each other. So they literally said, you know what, we're going to crowdsource water billing. So they literally asked people to submit water bills. And they were able to get in paper format thousands of water bills and were able to see the disparity, put it online and generated a lot of traffic. They didn't go with the old world model, which was to just build an army of people that would go out there, but they leveraged this crowdsourcing model. That's really, really interesting.

You're seeing what is happening in terms of human rights in Africa. A lot of villages where you don't necessarily have the web scale efficiencies or even access for that matter. What is happening is a conversion from radio to where people are actually sharing information at the local level around human rights violations with people that are based in San Diego. They are then converting that information to put it online and share it more broadly to hold those governments accountable.

And we are seeing also from a hyperlocal perspective, in Arlington County for example, where I spent a lot of time, we are seeing that people are actually taking information that is coming out of whether it's government institutions or even children in

terms of creating journalism and sharing those stories and having it curated very much like the Wikipedia model.

MR. AULETTA: I'm curious what impressions you have formed so far. There has been traditionally resistance in traditional media to citizen journalism, to two way, the two way in newspapers and magazines in a letter to the editor. You're describing a world where it really is two way. What is your impression about how traditional journalism, do they welcome that or are they scared by it?

MR. KUNDRA: I think they are scared by very much the same way that the government is very scared when it comes to creating a more open transparent and participatory democracy, which is that you are shifting power. There is this view that the best thinking somehow is at the top and that somehow people have a monopoly on the best ideas. And the world is changing. If you are in the pursuit of truth then you have to be able to triangulate that truth. And what better way than to say, you know, let's try to triangulate it as best as we can recognizing, accepting reality the way it is, which is that you may not get the best data points. But you'll always be able to get closer to the truth when multiple people are challenging it rather than a sort of high priest who comes out and says this is the truth and this is the version of the story.

MR. AULETTA: But isn't the high priest, when you use the phrase curation and I know it's important, based on the arguments you've made, that you need a curator. And that journalistic editor thinks of himself or herself as the high priest. Isn't there an inevitable conflict between curation and two way or often times a conflict?

MR. KUNDRA: Well, not necessarily because if you look at a model right now it's asymmetrically tilted towards just the high priest. And what I'm suggesting is that I think there is a better model, which is that you absolutely need experts who can made sense out of all this data. What is noise versus what is a real signal? And that's a hybrid model. At the same time what you don't want is bloggers out there throwing out whatever and saying that is journalism, because then you basically race to the bottom from that perspective. But if you can power these stories also through data, right, which in some cases may be irrefutable, but I also recognize that a story can be tilted one way or the other depending on what lense you put on, but you improve the conversation.

You always have the narrative side of the story and the quantitative side of the story. I think we need to be much -- we need to look at the quantitative side of it.

MR. AULETTA: But in looking at the quantitative side of it, one of the issues, politics is so polarized today that it's very hard to agree on a common set of facts. Your assumption is that there is a common set of data. What if people don't accept the data as a common fact?

MR. KUNDRA: Well, I mean, that's a much deeper problem I think as a society where everybody is sort of spinning what true north is, what the real truth is. But I think there is a set of issues that lend themselves in some ways very well as far as facts are concerned. The deeper issue and the reason I believe that you need to get more people involved, you need to crowdsource, you need to engage more people as far as slicing and dicing and looking at those facts because they will weigh in on both sides of the story.

MR. AULETTA: So let's switch and talk some about your experiences in government, particularly your last government tour which was the Obama Administration. When you look back at what you accomplished, what are you proudest of?

MR. KUNDRA: Well, I'm proudest of a couple of things. One is that we made huge strides in what I call the shift to power, the shift away from just a few bureaucrats behind closed doors to the American people. Data.gov is an example of that. The notion that we don't necessarily know all the answers. How do we engage the American people to solve some of the toughest problems we face as a nation. Second is--

MR. AULETTA: Give me some examples of that.

MR. KUNDRA: So, for example, if you look at health care, one of the things we did is we decided to release data around Medicare/Medicaid information. And so now all of a sudden at the national level you can actually see, you know, costs of knee surgeries and begin to compare a lot of that in terms of how the government is paying for that. You can see outcomes as far as hospitals. And we also issued challenges and prizes for third party developers to create applications. Somebody created an app, application that actually allows you to see before you check into a hospital what the mortality rate is in that hospital, how nurses are rated, what the outcomes are of certain procedures.

Another person created an application that looked at data from the Consumer Protection Safety Commission, an app that allows an expecting mother to scan a crib to see whether that problem has been recalled or not.

We also started shining light on government spending. So if you look at recovery.gov it had the lowest rate of fraud of any program that size, actually lower rate of fraud than even credit card transactions. And a big part of it was because the American people could drill down to their zip code, their address and see where the money was going, who got the awards. And it also allowed government to actually go after people who were committing fraud when it came to government spending.

MR. AULETTA: Describe how it also allowed you to announce to the public who the decision makers were. Describe what you did there.

MR. KUNDRA: So with recovery.gov we basically put out there in terms of who was making the awards, what that process was and also the ability to track that information on a real time basis. So it brought a lot of light to a process that was secretive and opaque in the past. All of a sudden you could see down the street which company won this contract, how much did they win it for, when was this project supposed to be done and if it wasn't done, why was this project continuing. So we could make sure that we were not throwing good money after bad money as far as taxpayer expenditures were concerned.

MR. AULETTA: What was, I mean, after the two plus years you spent in Washington, what was your biggest frustration? What couldn't you do that you wanted to do and why?

MR. KUNDRA: Well, I think when it comes to technology spending, for example, so the Federal Government spends about 80 billion dollars a year and one of the biggest problems in technology is that unfortunately it is allocated as part of the appropriations process bureau by bureau, department by department. What that leads to is immense duplication across the Federal Government. So for example, over the last decade we went from 432 data centers to over 2,000 data centers. And what I would have loved to see is a single committee on technology in Congress where we were able to build essentially a center for information technology so that we weren't spending money in a very, very duplicative fashion. From an Executive Branch perspective what we did do is we started shutting down these data centers, but I think it's going to take an act of Congress to really

go down there and say, you know what, we basically need three digital Fort Knox's. We don't need 2,000 data centers with interest in every congressional district in terms of building them there.

MR. AULETTA: But Congress, like the President, says they want to cut costs. What impedes their ability to do that?

MR. KUNDRA: I think there is a lot of interest in terms of these data centers who are in specific districts. And these data centers, frankly, preserve sort of the status quo in terms of government contracts. So I intend to be very active from this perspective to be able to engage with Congress continually to make sure that we're making the right set of decisions as we think about technology in the next ten, fifteen, twenty years.

MR. AULETTA: But one of the things you talked about and you just mentioned it a moment ago was moving, shifting more to the cloud which means some corporate servers so it is not a government expense and it's stored. But you met some resistance as you pushed that, from say Defense Department, State Department. Describe that conflict.

MR. KUNDRA: Let me tell you why it's so important the shift to the cloud in terms of technology. So when you look at that expenditure, I still remember my first day on the job when I walked into the White House, I was literally handed a huge stack of pdf documents. Everybody said congratulations, now here are 27 billion dollars worth of technology projects that are behind schedule and way over budget. And I looked at that and this is sort of a lesson also for media companies in a way. And I said, well, wait a second, there is no way a single individual is going to be able to turn around the ship. So as I was sitting before Senator Carper testifying on the technology agenda, I said, you know what, Senator, I'm actually going to launch an IT dashboard and we are going to shine light on the 80 billion dollars we're spending and I literally took the picture of every CIO in the U.S. Government, put it right next to the IT project that they were responsible for and the contracting company that was working on those projects and showed publicly how their performing on cost, schedule and their performance outcomes.

Immediately what happened, as we did that, is that the Veteran's Administration, they halted 45 IT projects. Then we took a picture with the President looking at the IT dashboard and a number of CIO's came to me and said, for the first time my cabinet

secretary asked to meet with me. I've never met with my cabinet secretary over the last decade or so to explain why these projects are red. So the notion of transparency drives performance in a huge way. But from there then we went to the next level. We started looking at these IT projects, really drilling deep in terms of what was going on. And in the case of the Department of Defense, for example, they had spent ten years and 850 million dollars on a personnel management system that failed.

Whereas if you look at start-up companies, if a start-up company were to go before the venture capitalists and say, you know what, give me six months and two million dollars because I need to build my own e-mail system or a payroll system, you would get laughed out of the room. And so from a technology perspective what I was pushing as far as the cloud first policy is concerned is it treats technology like a utility, very much like electricity or water to be able to say why is the government building all this redundant infrastructure. Those 2,000 plus data centers, the average utilization in terms of processing power was under 27 percent, average utilization for storage was under 40 percent and we're spending over 20 billion dollars a year on that.

So the shift enabled us to save a lot of money on something as simple as e-mail. As we moved to the cloud we were able to save 45 million dollars. And as we looked at the future, that is where most companies are headed. And that is where the government needs to focus on closing the technology gap.

MR. AULETTA: Is there a security issue though?

MR. KUNDRA: There are security concerns. But I think a lot of those concerns are over-hyped. And the reason they're over-hyped is because the government already, if you think about the 12,000 plus major systems, over 4,700 are already in the hands of third parties. It's not like the government is operating them. If you look at the government's telephone network, the government doesn't own its own phone network, except when it comes to military communications. So there is a case to be made in terms of what is the business need? If you are talking about national security, absolutely, the government must operate those systems. But when you are talking about HHS, for example, it doesn't make as much sense.

MR. AULETTA: Segue naturally from that to the question of cyber security and cyber threats. If you were a government that was alien to the United States and wanted to create havoc or harm what would you attack?

MR. KUNDRA: The critical infrastructure. And that is one of the reasons the Obama Administration or the first things the President did is he ordered a top down review of cyber security. And that is one of the reasons we created a cyber command that is led by a four star general, General Keith Alexander, because we recognize that the world we live in, countries are building massive offensive capability. And part of it is to come after obviously our command of control infrastructure from a military perspective, but also the critical infrastructure that powers the economy from our transportation infrastructure to the financial systems to what is happening with health care and Smart Grid and so forth

So it is critical that we hard wire security as we move more and more of these processes to the digital world. But when we talk about cyber security it's definitely an arms race. And it's not just nation states, but you also have organized crime that's building massive capabilities. And that is part of the challenge, right, as we enter this new era as more and more business processes and our identities move to the digital world is the question of our time.

MR. AULETTA: You talked about the many virtues of IT and many of the interesting and progressive things you did in your government service. What are the vices that you worry about?

MR. KUNDRA: There are always two faces to technology. And in terms of the dark side of technology we have to fundamentally rethink, you know, that we don't end up with a model where privacy is dead to the detriment of people. The same technologies that are enabling many of us to connect with people around the world to be able to share our entire lives can also be used and target people. So you are seeing that whether it's the Arab Spring in terms of how people are being systematically targeted or you are seeing how companies unilaterally start making decisions around the data that we share. We have certain assumptions around how that information is going to be used. But in the interest of monetizing it the notion of privacy is being thrown out the door. I think that is the seminal issue. I actually think privacy issues are far more serious than the cyber security issues.

MR. AULETTA: Before we come out to you for questions, let me ask you one final question. Presidential campaign this year, we saw that Mr. Obama when he ran was the first Facebook/Twitter president. And we saw how he harnessed the web to really do things that hadn't been done before, like raising money. Where do you see -- do you see anything, a quantum leap this year in the campaign so far about how the web is being used by these candidates?

MR. KUNDRA: Here is how I looked at what is happening with the web and sort of the national progression. If you think about the Agora, people used to come to the Agora to petition their government, to engage in commerce and they would come there to socialize. In the same way now, given what is happening with the ubiquity of broadband, given what is happening with access to technology, both through mobile devices and desktops, for the first time every American is going to have the capability of having a front row -- not just a seat, but the ability to participate because we are able to do things we just couldn't do structurally before.

What does this mean for campaigns. I think fundamentally what you are going to see is a huge shift in terms of the social Agora. Because if you remember, Facebook now has over 750 million people--

MR. AULETTA: 800.

MR. KUNDRA: Right. So now you go back to the campaign, they were nowhere near that last time. You look at the rise of Twitter, you look at YouTube. All these tools, every campaign is creating them as a strategic asset. They are using it. That's not even a question anymore. The big thing I think is going to be the velocity at which information flows, right, in the same way early campaigns had built out these war rooms. You are going to begin to see digital war rooms that are going to be much more algorithmic driven, the ability to be able to slice that data as fast as you can and have algorithmic responses to a lot of that data. So I think that's the next big innovation that you are going to see in campaigns, which is the power of algorithms and how to sort of respond. So I think where it is moving is what we -- the best way to think about it is to look at what's happening in the financial market, which is a high frequency trading. It's exactly what is going to happen in campaigns now.

MR. AULETTA: Let's make this two way. Questions. Please step up to the mic.

FROM THE FLOOR: Hi, I'm Susan Crawford. I'll be a visiting professor at Shorenstein and also at the law school for the next term and I was lucky enough to work with Vivek in the White House. I would like to knit together a couple of narratives here. One is we talked about the importance of voice and narrative in journalism and so that it be more data driven and able to use data. Let's apply that to leadership, governance. So what did you learn about leadership when you came to take on those fractious CIO's and the 80 billion dollar budget and how that can be enabled or facilitated by technology. See if we can tie these two stories together.

MR. KUNDRA: I actually learned a lot about leadership and I was very fortunate in life to have the opportunity to serve at the county level, state level, city level and then at the federal level. The only thing that changed was actually the number of zeros that I was managing. But what you realize I think is there is this notion of government, somehow that it isn't working, it's broken in a big way. So I definitely see that at the political level. But when you look at the career, public service on a day to day basis when you're out there on the front line, they deeply care about the work they are doing.

So one of the things I did is actually I purposely decided not to spend a lot of time with the political appointees. So to drive change I went and I dealt directly with the career public servants because I knew that on a long term basis that they're the ones who are going to drive change on an ongoing basis. So it was important to sustain that. And also I think it really, really helps to be naive. And what I mean by being naive is that story I shared about building up a dashboard in 60 days. When I was testifying I could hear gasps behind from my team. They are like nothing gets done in 60 days.

I literally spent from 7:00 p.m. till midnight for the next 60 days working with a team of developers and career public servants and we were all in and we were actually able to execute. So there are a lot of assumptions. People just assume too much in terms of the status quo and therefore they act. And when they act they are always acting sort of in a negative way because they come with all this baggage around how government is rather than how it should be.

FROM THE FLOOR: I'm Dick Tofel. I'm the General Manager of *Pro Publica* and we're trying to do a lot of the kinds of journalism that you were talking about, about data. And I

have to report to you that our experience with this government is not as happy as you had led on. The President has talked about openness in government in a very different way than his predecessors. You have, the Attorney General has. And you've published a lot more data that the government wants published.

But what my reporters find in dialysis with HHS, in formaldehyde with EPA, in loan modifications with treasury in a project I can't name right now because it is ongoing with the Department of Justice. But across the government the attitude is about things that people want to know that the government is not interested in affirmatively communicating about is it's the same old stonewall. That there has been frankly no change in the attitude of the government about releasing information upon request and even information that we believe the law requires.

Can you explain? Do you share that frustration? Do you feel like there is a disconnect between the administration's philosophy about transparency and the way the government is actually performing, particularly with respect to programs that you might not let -- the political people in government might not want to talk about, like, for instance, the loan modification program that I think everybody agrees has been a failure.

MR. KUNDRA: Sure. So I would definitely agree with you in terms of the attitude across the board. And it is such a big shift if you think about opening up the operations of government. In the space of technology, right, when I was about to put out all the performance indicators I had to go through so many lawyers and I just, I think the reason we were successful is it just moved too fast in terms of just putting all that information out there. I think the big challenge, where you can be helpful and people outside the government can be really, really helpful is in helping prioritize what is sort of number one, two, three, four, five.

So from the White House perspective what I'm doing is what the President did on his first full day in office. He issued this policy directive around opening up government followed with an open government directive that moved the agencies to be much more transparent and particpatory. Now the challenge we ran into and I sat at countless meetings with people outside government is that given sort of the resources and the focus, so you would go to an agency and you would get, for example HHS, what does success look

like. There are 25 different versions of what success really looked like. So naturally what the agency would want to do is go after what they thought they could deliver on or the lowest hanging fruit. And I think what will be key is to create sort of a prioritized list of what is the data that is really, really important that needs to be out there and just kind of continually hammer that.

Because it's very, very difficult in any institution to get people to give away power. And I think it's going to take that consistent chipping away. And no one expected this to happen obviously within a month or two months. The President led, he started with releasing the Secret Service logs of every visitor that came to the White House. We started releasing a lot of the performance data. We focused on getting rid of the FOIA backlog. But there isn't an end. This is a continual process.

MR. AULETTA: Let's get another question.

FROM THE FLOOR: I'm a Nye Fellow from China. I'm a science journalist from China. I have two related questions. The first one is this digitalized, there is more and more information from and about public, from the government and the related agencies. But giving more information does not mean transparency. You need to make sure the public rightfully use it. You need to make sure public access it. You need to make sure that the public can use it to utilize it. So what's the mechanism from the -- do you think that can help the government, the better use of more and more amounts of information. The second related question is based more and more on digital media, what you call social media. Public more easily to express their opinions, but in the digital world the situation is the people who speak louder than others does not mean this opinion is more general. So in the digital world how do you think you can identify the most representative public opinion so that you can make a solution? Yes, thank you.

MR. KUNDRA: So I think on the data, I think it's a question of sort of a philosophical approach to how you think about it. I'll give you sort of an internal struggle that I went through when I looked at the way we're going to go forward with the data that got out. There are two decision points and sort of ties to the earlier question. One was should the government release this data or should the government actually try to build applications as you're suggesting to make it really, really easy for people to use. I actually thought that was

a wrong approach in terms of the government trying to build all these applications to make it easy for people to use because I believe that long term the institutions were going to put their best foot forward.

They are going to try to massage the data and try to present it in the light that makes the government look really, really good. So what I decided to do was to say, look, we should release the data in the raw format. That should be the principle. So the reason we wanted to release it in the raw format was because my view was that journalists would take that data and actually curate it. Citizens would take that data and curate it. Companies would take that data and build the next generation of multi-billion dollar companies.

I mean, just think about the GPS data for example, right, that the Department of Defense released. It gave birth to an entire GPS industry or the genomics data that HHS released or NIH released with other world bodies gave birth to the whole movement around personalized medicine. So I'm still a big believe that when you think of data it's much better for the government to be a grocery store than to try to build a bunch of restaurants.

MR. AULETTA: Let me just follow up one second. So WikiLeaks is the ultimate transparency. Do you support that?

MR. KUNDRA: Well, no. I don't think so because in the case of WikiLeaks unfortunately that was -- those were secrets that the government had that were essential to dealing with other nation states. And that was classified information that had had harmful consequences when it comes to U.S. interests.

FROM THE FLOOR: Good morning. I'm Rory O'Connor. I was a Fellow here three years ago looking at some of the filtering of information issues you referred to. And I heard you talk about curation and you talked about the role of social networks. I wonder if you could comment briefly on two other filters that I hear a lot about. One is the algorithmic solution of learning machines, the recommender systems. And the second is brands themselves. Eric Google is on record as saying that the internet is a cesspool of misinformation and that brands are the solution. So I wonder if you could comment on both brands and on recommender systems, are they going to help us separate the signal from noise?

MR. KUNDRA: I think so. I mean if you go back to early human civilization, right, and actually even if you go back, you look at how people used to think about the world. It was very much sort of a one to one correlation, which was a lion equals danger, or fire equals danger. And I think the human mind began sort of abstracting at a higher level and started conceptualizing things that allowed us to go through -- to develop breakthroughs. I think what is happening is machines are going to be able to do in ways that the human mind just can't do is they are going to be able to take this vast amount of data that's out there. And by the way, we are probably at .000001 percent of what's about to happen in the next five years even.

Think about the entire world and how it's going to be instrumented and where we already are with sensors around our health systems and transportation systems and financial systems and even our own lives in terms of how we are living in a day to day basis. So where machines can be really, really helpful in algorithms is in terms of allowing us to slice and cube that information. But it's going to require the human mind conceptually to provide those insights. But as far as misinformation is concerned, I think that's a very subjective set of views in terms of what is information versus misinformation. That is why I'm a huge believer in trying to power as much of it with data as humanly possible.

FROM THE FLOOR: George Macready, independent scholar. I would like to push back a little bit on the idea of doing things in-house in government rather than buying them off the shelf. There is an example recently at the NSA of an in-house, from what I understand, data mining program that was developed for a couple of million dollars that then a new NSA director came in and said, no, we need an outside contractor to do this and they developed a program that was billions of dollars over budget and didn't do what the smaller program that was developed in-house was. And when people in the NSA started talking about that as whistleblowers they were actually indicted by the Obama Administration from my understanding as being -- as releasing secret information.

So what can the government, what should the government develop in-house as opposed to buying off the shelf or buying from a vendor. Because we have this example of something where the government was doing it cheaply and it didn't happen.

MR. KUNDRA: I think you are misunderstanding my point there. It sounds like in this case that's actually a core mission of what the NSA would be doing. So what I'm suggesting is that when it comes to commodity technology, right, it makes no sense. And what you don't want is obviously you are not going to have the FAA basically say someone else go take care of the next generation of air traffic control systems, because that is core to what the FAA does, but the FAA doesn't need to be in the business of building our e-mail systems. So what I'm suggesting is where you have commodity IT that adds no competitive advantage in terms of what the government would bear would bring to the table, why are we wasting billions of dollars. But when it comes to mission IT, absolutely. You know, you look at whether it's DARPA, you look at NSA, you look at NIH. You actually want NIH, for example, engaged in the human genome project.

MR. AULETTA: Time for a few more questions.

FROM THE FLOOR: Jim Snider, former Fellow here at the Shorenstein Center, currently a Fellow at the Safra Center for Ethics. My question picks up on a question or statement that Ken Auletta made earlier in the conversation about the economics of local advertising online and how uneconomical it is. The question is there was an assumption there, the way I heard it, that the economics of local advertising were exogenous rather than endogenous to public policy. In other words it's technology in the private sector that turns the economics of essentially local news rather than government policy. But what we know about the economic viability of local ads is ability to do behavioral targeting to track the behavior of individuals over many databases largely determines viability. And there the government is very involved through privacy policy, the ability to track.

So the two questions are, one, is this really a big factor driving the economics of local advertising. For example, Google has been browbeaten into not sharing the behavioral information across all the services that derive from Google Search to Gmail and all these things. They've got all these firewalls that the government insisted. And that has dramatically harmed the economics of local media, I would say, in the United States, maybe for a good reason. And then the second one is if you do believe that's a significant driver, public policy driving at the economics, why is it that the Shorenstein Center and the whole

media policy -- there's an infinite number of these privacy policy events, they just don't see it as one of their issues that's critical to the future viability of online news.

MR. KUNDRA: I think that's why I said the seminal issue of our times right now is privacy. And if you actually look at government operations one of the reasons there is such inefficiency when you go online and you are interacting with whether it's the Social Security Administration or the Department of Education or IRS is because in government there are very, very stringent rules in terms of how data can even be shared. So it impedes actually the ability for the government to provide you an experience as rich as what an Amazon or a Google would provide you.

So from a privacy perspective I think it is going to hinge on that. There is a huge debate. I wish I had an answer for you, but I think that is the big issue that we need to explore right now which is to try to figure out, well, what happens as Congress and the FTC are trying to figure out what they do because it could wipe out entire business models depending on which way the policy instrument--

FROM THE FLOOR: In one sense you are saying you do believe the government policy is potentially a critical factor determining the viability--

MR. KUNDRA: Oh, yeah, absolutely. And the future of all these business models.

MR. AULETTA: Next question.

MR. KALB: I'm Marvin Kalb. I'm sort of a writer now. I have a suggestion and a question. The suggestion is you have used a lot of terminology that I am not familiar with and probably everyone else is, but I am not. So my suggestion is that you have a glossary of terminology to involve more Americans in what it is that you are talking about.

(Laughter)

MR. KALB: My question has to do with the international side of this. You use terminology in describing threats from abroad in very military terms. And I assume you did that deliberately. So I am asking you which nation in the world today represents the greatest cyber threat to the United States?

MR. KUNDRA: Well, I'm not sure if I can comment on a particular nation. What I can say is that--

MR. AULETTA: We believe in transparency here.

(Laughter)

MR. KUNDRA: I still have my top secret clearances. But no, in terms of, look, as far as nations are concerned there isn't a single nation right now with an advanced military that is not building out aggressively a cyber offensive capability. So what you are seeing is--

MR. KALB: What does that sentence mean that you just used?

MR. KUNDRA: So they're actually building out capabilities in the same way traditional militaries, when you think about land warfare or sea warfare would invest in whether it's submarines or ships or fighter jets, they are investing in weapons in the digital world to figure out how do you cripple a country like the United States, whether it's the financial system, how do you attack it? How do you attack the digital -- or sorry, the transportation infrastructure in terms of disabling an entire transportation grid. And that is what a lot of these nations are building. And it's the future of warfare, which is going to be waged in cyberspace.

MR. AULETTA: Let's take one last question.

FROM THE FLOOR: I'm Joe Nye. I teach here at the Kennedy School. I want to press you a little further on security, which you seemed to downgrade somewhat. Early in the administration President Obama commissioned Melissa Hathaway to do a hundred day study. In early May President Obama declared this an absolute priority. Now three years into the administration there is no strategy for security. There is a bit of a strategy for .mil, which is about ten percent of the internet. There is virtually no strategy for .gov and there is no strategy for .com, which is where the critical infrastructure is located. Do you regard that as a failure of the administration and of the chief information officer?

MR. KUNDRA: First I would totally disagree with you on everything you've said.

(Laughter)

MR. KUNDRA: And the reason is that if you look--

FROM THE FLOOR: I can get you sources that will back me up.

MR. KUNDRA: Great, great. We can have a healthy debate on it. But I think if you look at what the President did in terms of putting Howard Schmidt in place as a cyber security coordinator in the White House, if you look at the model legislation that's before Congress, for the first time any administration has put forward a comprehensive model

legislation that is before Congress that actually looks at the patchwork of the 47 different laws when it comes to privacy, if you look at the cyber command site on the military front and even on the civilian side, on the .gov side, there are tremendous changes that have already happened. Just to give you one example, the State Department historically had spent 138 million dollars and six years and basically studying its security problems. And literally they would issue these reports year after year and file them away in the secure cabinets throughout Washington that were probably much more secure than the very systems they were supposed to protect.

And what's happened in the Obama Administration, while the Administration actually put in place red teams recognizing that the way you go after security is not some loser report that some consultant is going to write, but you actually attack your own systems, find the vulnerabilities and continually patch them. That's what is happening in the .gov space. But I would encourage you to look at the legislation because it's going to require massive changes across the board, whether it's on the military side, civilian side, or even within the private sector. As I've said, in terms of critical infrastructure, a lot of the core infrastructure is not in the government's hands, it's in the private sector.

FROM THE FLOOR: Doesn't that make that part of a cyber security strategy? When I said we don't have a strategy for .com, which is where the critical infrastructure is located, if you don't have a strategy to protect it, you don't have a strategy. That's 80 percent of the internet, or let me summarize and say you are telling me in answer to my question then that we have a pretty good security strategy for cyber now?

MR. KUNDRA: Yeah, I mean, you should go and read the legislation--

FROM THE FLOOR: I have.

MR. KUNDRA: --that the Administration proposed and the other thing is that it depends on which way you are leaning, right? So there's two world views. One world view is people that would want to militarize the entire internet which is crazy, so I reject that view.

FROM THE FLOOR: I reject it.

MR. KUNDRA: Right. So that's what I mean. So there are a number of people who will say, well, you know, the government should be monitoring everything. The government

should be basically looking at everything the American people are doing, which is crazy. So they have an extreme view of cyber. And the other view is that the government will partner with the private sector. And we need to do so, but the government can't take a hundred percent responsibility for every single company that is out there. And I think that is where the balance is that is being debated right now in Congress.

MR. AULETTA: Well, as the curator in chief I want to thank you. It was a wonderful discussion.

MR. KUNDRA: Thank you very much.