



Vivek Kundra

The Challenge Ahead: The Transformational Power of the Cloud



While he served as the Chief Information Officer of the United States government, Vivek Kundra was charged with managing IT's role within the government.

Kundra, who accepted the job in January 2009 when President Barack Obama took office, explained how he became responsible for managing government technology spending that totaled \$80 billion.

After a review, spending was cut, data centers were shut, and the government moved away from investing in infrastructure. A "cloud-first" policy was adopted, improving government processes.

Kundra said a lot of effort was focused on cyber security, but the existing systems were less secure than cloud technologies. "We found everyone was trying to

apply military-grade security to something as simple as a website that would tell the American people how their money was being spent," said Kundra. "That's where you would end up with astronomical costs and timelines that made absolutely no sense."

Kundra said there was a lack of innovation happening "in the name of security. The focus was primarily inward, not on citizens and citizen services and how you transform them. The shift to cloud computing actually enabled that transformation."

To create a more open, transparent and participatory government, a platform called data.gov was launched. Kundra said it was important to make data available to the public for three reasons:

- It allowed the American people to watch how the government was spending money.

- It allowed entrepreneurs to build companies on top of the open data movement.
- It allowed agencies to become more efficient and lower the costs of government operations.

For example, entrepreneurs took Medicare and Medicaid data and enabled the public to see in real time how doctors are rated at hospitals. Others created an iPhone app that enables an expectant mother to scan a crib, before purchasing it, to ensure it hasn't been recalled.

"But what I think is super exciting as I look forward are game changing technologies that are transforming entire sectors of the economy," said Kundra.

One example he cited is Uber, a company whose mobile app enables people to click on their smartphone at their current location and get a cab based on that location. It's a combination of GPS government data and mobile device technology that is yielding the cashless transaction.

Another example is Nest, a home thermostat that is wifi-connected so users can control it with their mobile

devices. Both companies are effectively replacing traditional methods of accomplishing the same tasks. "What does this mean for your organization or the government? What's going on is creative destruction of entire sectors of the economy," said Kundra. Initially, the new innovations were met with some resistance. Kundra noted how the traditional cab industry protested when Uber first came to Washington, D.C.

While entrepreneurs seeking to start a company used to need significant capital to do so, that is no longer the case. "It's no longer limited to those who have a lot of capital upfront to disrupt and reinvent an entire sector of the economy," observed Kundra.

"You're seeing an amazing battle between the past and the future," said Kundra. "The question is do you want to be Amazon, or do you want to be Barnes & Noble? Do you want to be Blockbuster or Netflix? Do you want to be a traditional cab driver or an Uber driver?"

Kundra said this is all a shift from as recently as 10 years ago. "It's a fundamental shift in the power away from the hands of the few into the hands of many." ■