

OPENING STATEMENT

The Honorable Ben Quayle (R-AZ), Chairman

Subcommittee on Technology and Innovation

The Next IT Revolution?: Cloud Computing Opportunities and Challenges

September 21, 2011

Good Morning. I'd like to welcome everyone to today's hearing, which is being held to examine the opportunities and challenges presented by cloud computing, and to analyze the appropriate role of federal policy in the growing cloud computing enterprise.

Over the last few decades, developments in the IT sector have driven our country's economic growth. Cloud computing has the potential to be the next wave. Its widespread adoption offers significant opportunities for new innovation, and productivity gains for both the public and private sectors.

Users of cloud computing services will be able to access high-powered computing functions from a range of devices that previously were only available to entities with large IT infrastructure budgets. Cloud services will also allow individuals to share information with colleagues in real time, dramatically increasing opportunities for collaboration.

The adoption of cloud computing has the potential to significantly reduce IT infrastructure and maintenance costs. Because these services are elastic, individuals will only pay for the computing services they consume, and will no longer have to worry about over-investing or under-investing in IT. Companies can potentially use these savings to help grow and expand their business, while governments will be able to reduce their massive taxpayer-funded IT budgets.

Finally, cloud computing provides its users with unlimited access to data and applications from any internet-connected device.

While the benefits of cloud computing are vast, there are a range of challenges that will need to be addressed before its potential is fully realized.

Cybersecurity is a major concern for many users who are considering moving their computing functions to the cloud. Users must have confidence that their data and applications will be secure and that their privacy will be protected. Further, cloud service providers will need to offer users different tiers of security depending on sensitivity of their data.

Widespread adoption of cloud computing requires broad network access and resiliency. With increased reliance on the cloud for computing functions, broadband networks must be up to the task of handling the massive amounts of data that will be transmitted over the Internet.

Users will also want assurances that they will be able to transport their data and applications from one service provider to another. Therefore, the development interoperable standards is a

key issue. But, as we have often discussed in this subcommittee, it is important that these are consensus-based standards that will not be so rigid that they inhibit the opportunities for innovation that cloud computing offers.

Finally, liability will need to be addressed to reflect the new cloud-computing paradigm.

While these are only a few of the relevant issues, it provides a sense of the challenges confronting industry, consumers, and policymakers in determining the appropriate path forward for this technology.

We have an excellent panel of IT industry witnesses who will share their insights on these topics with us. We have also asked each of our industry witnesses to comment on the appropriate role of the federal government in cloud computing. Further, we will hear about the General Services Administration's efforts to adopt cloud computing services and enable other federal agencies to do the same.

I'd like to extend my appreciation to each of our witnesses for taking the time and effort to appear before us today. We look forward to your testimony.