Emerging Federal Technology Markets – Areas to Watch

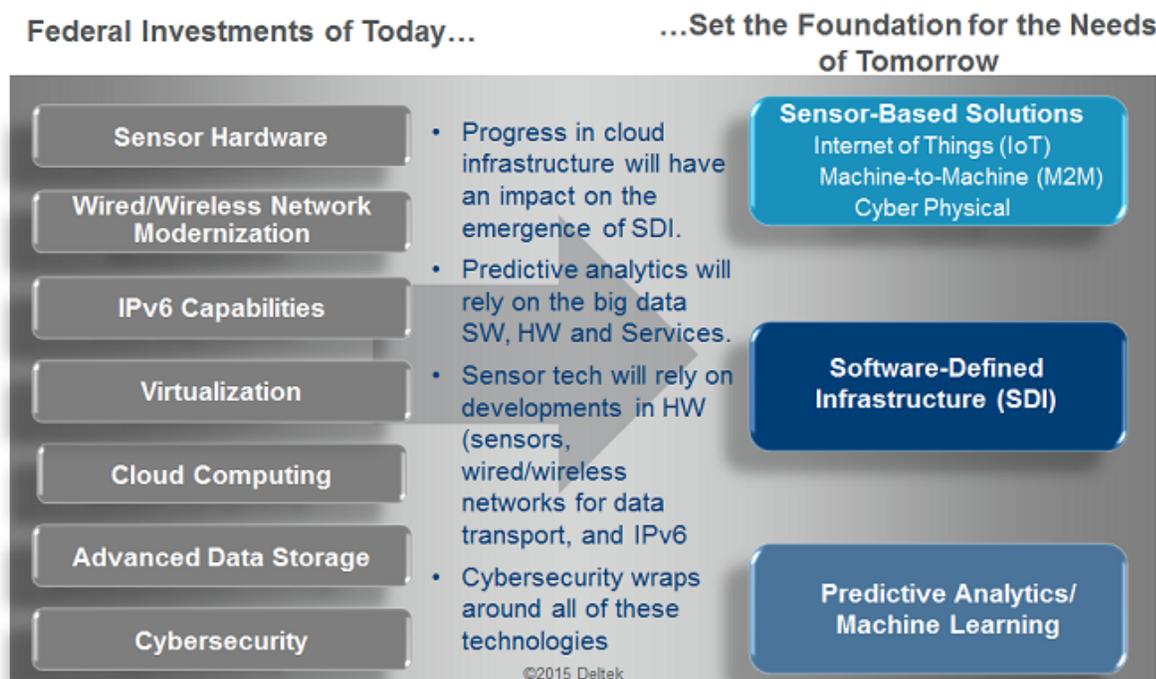Posted At : January 13, 2015 1:18 PM | Posted By : John Slye

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Can technological innovation drive federal IT investments, even in the midst of budget pressures? Absolutely. This is what we explore in our latest report on Emerging Federal Technology Markets.

Under long-term pressure to "do more with less," federal agencies are leveraging current trends in federal IT – cloud, wireless networks, IPv6, and virtualization – to gradually adopt new technologies that enable cost savings and the more efficient use of IT resources. Some of my colleagues and I took a look at how these and other technologies are shaping federal IT investments today and in the future.

Federal Investments in Foundation Technologies will Drive Emerging Markets

Technological change and proliferation span the gamut when it comes to impacting federal agencies. Sensor technologies are being introduced to track facility energy consumption and enhance physical security, while software-defined infrastructure is being explored to eliminate bottlenecks that result from stovepiped systems and the growing volume of data. Machine learning technology is being tested to create "smart" networks that rely less on person-based administration. Tying it all together are predictive analytics, which agencies are using for a growing number of purposes, from forecasting network performance and enhancing cyber security to ferreting out waste, fraud, and abuse. The result is that today's investments set the stage for tomorrow's capabilities. (See graphic below.)

Key market factors shaping the federal IT landscape

Some of the major drivers and key findings from our research include:

- The drive to leverage sensor technologies and the data analytics that these enable is a driving force behind agency network modernization efforts like the DoD's Joint Information Environment. The pace of sensor-based innovation is tied to the success of these efforts.
- Software-Defined Infrastructure (SDI) is more pervasive than generally believed, particularly at agencies with highly-evolved Infrastructure-as-a-Service offerings.
- Federal interest in SDI is not hype; it is a genuine trend with a growing number of current and planned use examples across federal agencies.
- The use of predictive analytics programs has expanded significantly across the federal government since FY 2010, making it a maturing, though niche, technology that is expected to have continued strong growth.
- The inclusion of predictive analytics as an offering on GSA's Alliant 2 and, potentially, NS2020 government-wide contracts should help it become regarded less as an exotic technology and more as a standardized commercial-off-the-shelf solution.

The modernization of agency IT environments is opening the doors to future investment in emerging technologies. The convergence of agencies' work on expanding wireless networks, deploying standardized, commodity hardware, and engineering Internet Protocol-based transport networks is enabling the introduction of new sensor technologies and software-based capabilities. The impact of emerging technology adoption will be to introduce greater efficiency and security to agency IT environments.

To get our full perspective on Emerging Federal Technology Markets **read the full report**.

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