Technologies and IT practices that have historically co-existed as separate silos in federal agencies have started to coalesce around new trends and solutions, according to Accenture research.

“It’s not easy to silo technology anymore,” Dominic Delmolino, chief technology officer for Accenture Federal Services, told an audience of federal and industry IT executives who gathered in Washington on April 25 for the event, IT @ Digital Speed: What’s Really Required.

Delmolino presented Accenture Federal Services’ Technology Vision for 2018, which shows evolution in the federal IT space from disjointed, parallel programs to interdependent solutions that increasingly leverage cutting-edge tech. With hundreds of responses from government and business IT leaders, Accenture found convergent technologies in artificial intelligence, augmented and virtual reality, and the internet of things.

“Trends are starting to coalesce,” he said. “Big data is being used to train in AI. Data must be secured, so it becomes blockchain. IoT is mobile, so it needs intelligence based on data.”

Data veracity is also a priority. Many federal data collection activities are mandated, Delmolino said, yet “most federal executives feel they are not spending enough time validating the quality of data. Agencies seem confident in the data they get, but not in validating and confirming it to be useful.” He added, “Today, data is everywhere. But how do we make sure the data is strong enough that we can base our decisions on it?”

Delmolino also talked about the goal of “frictionless business” – the ability to communicate with partners across digital ecosystems without architectural and security barriers. “Agencies talk about doubling the number of partners they receive data from,” he said, adding that building APIs into data and having a larger collection of microservices allows for it.

One agency that demands frictionless business is Federal Emergency Management Agency, which potentially must partner with every emergency services agency at the federal, state and local level, throughout the country during emergencies. Ted Okada, FEMA’s chief technology officer, opened the event by talking about the need for efficiency.
Agencies acquire “technical debt” when they remain dependent on inefficient legacy systems, he said.

“Communications at FEMA has to be fast,” he said. “If it’s not, the result is deadly.”

The way to get there, Okada said, is by modernizing processes with DevOps and DevSecOps, by using off-the-shelf scripts, low- or no code, and microservices.

Frank Konieczny, CTO of the Air Force, spoke about how to create change management in an organization for cloud success. He outlined four approaches:

• Get senior management on board. “Otherwise, nothing gets done,” he said, adding, “They’re going to ask, ‘What is the ROI?’”
• Communicate about the program throughout the organization
• Be prepared to talk about incentives and disincentives
• Have a support team that knows the details of the organizations’ applications and data. “People are very protective of their apps and data,” he said. “As you bring in people, you have to convince them that this is the way to go.”

With many CTOs in attendance, the event included a panel session about the role of CTOs in IT modernization.

Charles Worthington, CTO at the Veterans Affairs Department, said his role is to break down silos for technical solutions and bring to fruition early programs that need departmentwide support.

Navin Vembar, CTO at the General Services Administration, spoke of leading cultural change and ensuring improvement and delivery of services.

Rob Palmer, executive vice president and CTO for ShorePoint and former Deputy CTO at the Homeland Security Department, added: “The CTO really is that bridge builder. Modernization, transformation, innovation --all require some infusion of thought ... into existing operations.” CTOs often meet resistance and “must build relationships to make that a smooth glide path.”

The panelists agreed that any modernization project must begin with identifying a need and a solution, rather than simply bringing in the latest emerging technology without specific plans for it.

“Anytime you try to lead with the technology, that doesn’t work out well,” Vembar said.

FCW Editor-in-Chief Troy K Schneider closed with event with a discussion with Gus Hunt, Accenture Federal’s cyber strategy lead and managing director, and Mark Schwartz, enterprise strategist with Amazon Web Services. Hunt, former CTO at the CIA, and Schwartz, former CIO at Citizenship and Immigration Services, said it’s much easier to get leadership buy-in for modernization when you can show how the technical solutions tie to mission needs. Both introduced Agile and DevOps to their respective agencies after struggling with lead times that took years to deliver on mission-critical needs.

“It could take 10 to 15 years,” Schwartz said. “That’s not acceptable in national security.”

The reason for the delays, Hunt said, were efforts to get deliverables to comply with security – which came late in the process. Agile and DevOps could change that. To get the necessary support, he turned to policy first.

“Agile is about team empowerment, decentralized authority and giving people ownership,” he said. “But I've found if you don't have a command-and-control approach, it's hard to get people to adopt it. I developed a policy that instructed us to pursue Agile, which meant the next day we were transformed. But that doesn't mean people accepted it or bought in to it. It takes a while.”

Then, Hunt said, stick with it. “If you stop focusing on it too early, then it dies on the vine.”