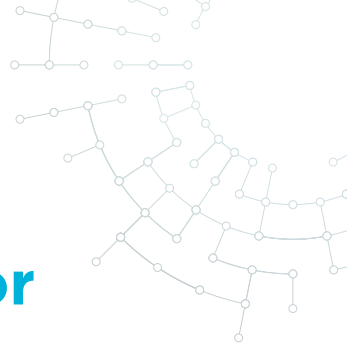


# Innovation Index:

## How federal IT leaders are preparing for an era of constant disruption



Like many private businesses and commercial organizations, federal agencies quickly adapted to the abrupt, unexpected disruption caused by the global pandemic. Over the last two years, agencies effectively addressed workforce challenges while maintaining a focus on serving the public. Our research shows federal respondents maintained or improved employee and constituent satisfaction and productivity during this period.

Those who implemented technology solutions to support constituents, used these solutions to increase efficiency, and applied them to secure government data performed better when faced with the adverse conditions of the global pandemic. And while federal agencies still have more work to do, they are well positioned to weather continued unexpected change.

In 2021, NTT DATA and Oxford Economics launched the “Innovation Index: Digital Strategies for an Era of Constant Disruption,” a survey of 1,000 North American business and IT executives—100 of which came from federal IT employees—to find out how organizations are approaching digital transformation initiatives.

### Constituents first

In our survey we found three key trends across government leaders: constituent satisfaction, efficiency, and cybersecurity.

Expectations about what good service looks like have changed; to meet this demand, 79% of federal agencies are placing a significant focus on constituent satisfaction.

But agencies are often expected to do more with less, so operating more efficiently is critical to turning such aspirations into reality. This may explain why 60% expect to put a premium on improving process efficiency and productivity going forward. However, 58% do not feel adequately prepared for the pace of technology change or rapid shifts in public policy (59%) to help accomplish these goals.

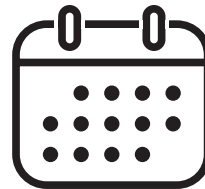
It's no surprise that in the wake of the SolarWinds breach and a string of cyberattacks, agencies are also under pressure to meet a flurry of requirements meant to strengthen security and resiliency. Many (60%) have made reducing cybersecurity risk a top focus, but more than half (58%) struggle to maintain constituent trust in privacy and security of the services on which they rely.

**Fig. 1: Long term planning helps prepare for disruption.**



**54%**

of federal government respondents say their organization's strategic planning is increasingly long-term...



**40%**

say their organization is proactive in setting an agenda for the marketplace...



**58%**

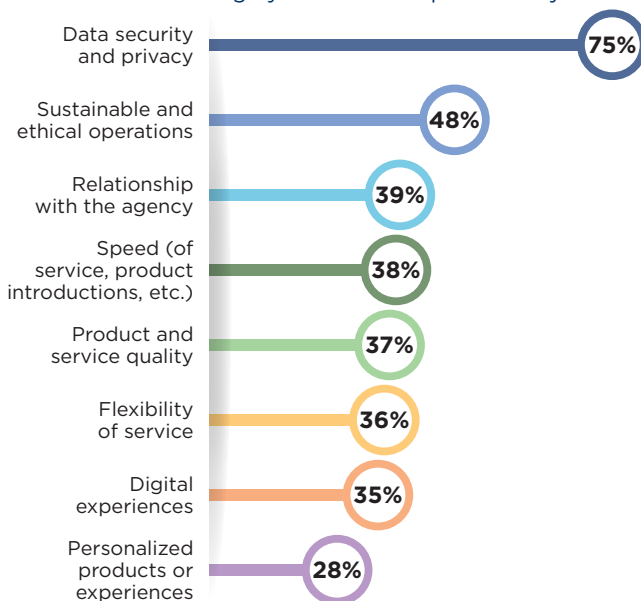
do not feel equipped to deal with constant, rapid change

## Leaders express mixed results

Government leaders believe they are making good on their goal to better serve the public. Despite more than a quarter acknowledging they are not adequately reaching their objectives, almost all (94%) say they are at least average in satisfying constituents. However, just 48% indicate they are above average in fulfilling a broader mission.

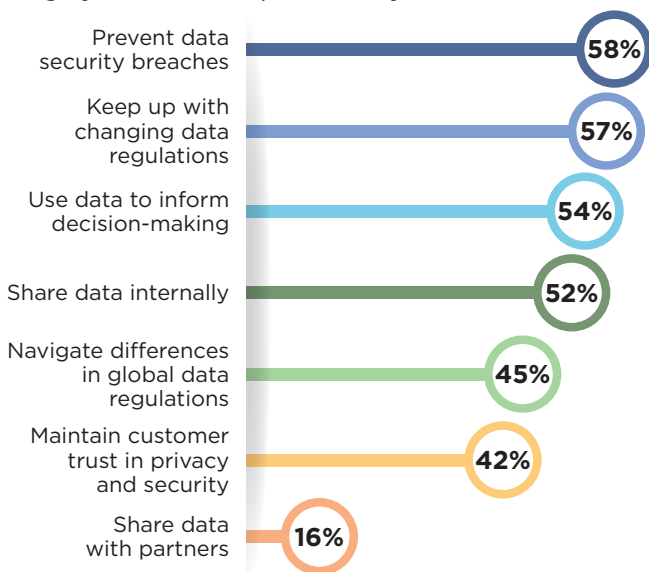
Constituent demand is a priority for nearly three-fourths of federal respondents, and 45% say it is likely to drive strategic or organizational change. The top driver of significant change is solving societal issues (62%). And the experiences and interactions of those they serve (35%) are well behind data governance (80%) and infrastructure and performance (46%)—the leading motivators in driving innovation. Nearly half of the government respondents struggle to keep up with their constituents' changing expectations, which increasingly include the desire for personalized experiences.

**Fig. 2: Meeting constituents' expectations and needs.** "How effectively does your agency deliver the following to constituents?" "Highly effective" responses only.



**Fig. 3: How effectively does your agency do the following?**

"Highly effective" responses only.



## Data-related opportunities and obstacles

Many agencies are succeeding in translating data-driven decisions into actionable insights. Most are effectively using data to serve the public—82% say data determines ways to interact with constituents.

However, only 42% feel they are highly effective in maintaining constituent trust in privacy and security. Despite this, federal agencies report greater prowess over all other industries surveyed in the quest for private and secure data. Nearly 60% say they are highly effective at preventing data security breaches.

Confidence also runs high when it comes to current data management practices, but agencies will have to continue improving data governance if they want to stay ahead of future challenges. This is no easy task, since most (58%) say effectively managing data keeps getting harder. Efforts to adequately use data are bogged down by increasing regulatory issues (42%) and inaccurate data from third parties (38%)—both of which are obstacles that must be overcome as policies shift across the globe.

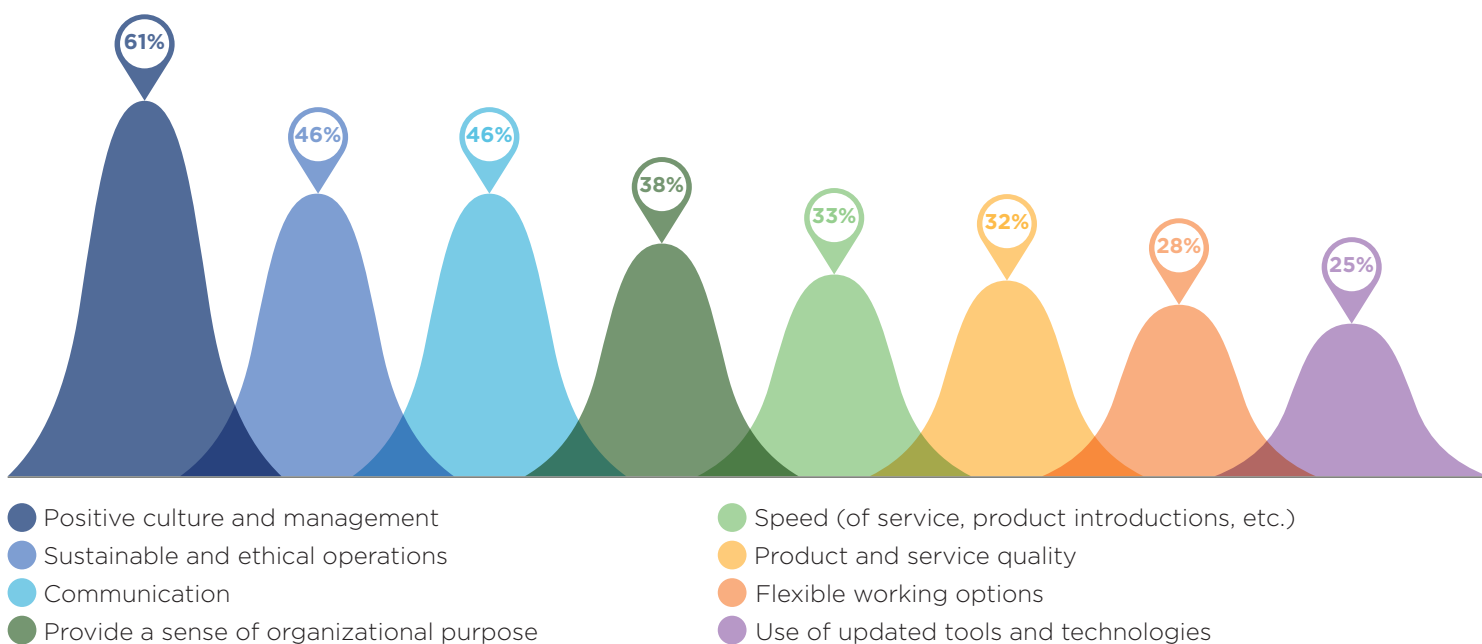
## The state of the federal workforce

Government workers were pressed into action during the pandemic to meet urgent and rapidly shifting constituent demands. But federal agencies appear no more employee-focused than other industries when it comes to giving workers the latest tools to carry out tasks. Less than half of government leaders say employee satisfaction is driven by providing the workforce with updated tools and technologies (25%), offering a positive culture and management style (35%), or opening clear lines of internal communication (40%).

Agencies do slightly better than other industries when it comes to respecting sustainability (49%) and providing organizational purpose (42%). And most (87%) say they are average or above average in satisfying employees' needs. One potential issue on the horizon is that 43% expect workforce and workplace disruptions to affect operations and performance in the next two years, but only 30% feel prepared to handle them.

**Fig. 4: How effectively does your agency deliver on the following?**

“Highly effective” responses only.



## Technology leadership

On the surface, federal government IT leaders are well positioned to succeed in their digital efforts—but it is clear that their aspirations do not always align with the reality of their technological landscape. Just 42% are highly prepared to deal with the rapid pace of technology change to come, as many agencies rely on decades old technologies. However, they are investing in key foundational technologies including ERP (77%) to drive planning and processes; and private cloud (70%) to create agility to meet changing public demands, putting them at par with their counterparts in the private sector.

Federal government shines brightest in cybersecurity, where respondents excel at reducing cybersecurity risk. More than half (58%) are confident they are highly effective in preventing data security breaches—higher than any other industry in our survey.

Federal agencies have made less progress in the implementation of some established and emerging technologies. Although agencies show a keen interest in artificial intelligence (AI), for instance, they trail their counterparts in other sectors in embracing the next wave of AI-enabled technologies. These could be critical to public service during future disruptions and could help streamline processes such as contracting for goods, supplies, and services.

While many have invested in AI (67%) and the Internet of Things (52%) in at least some functions, they come up short when it comes to advanced automation (only 12%) and conversational interfaces (25%). These investments

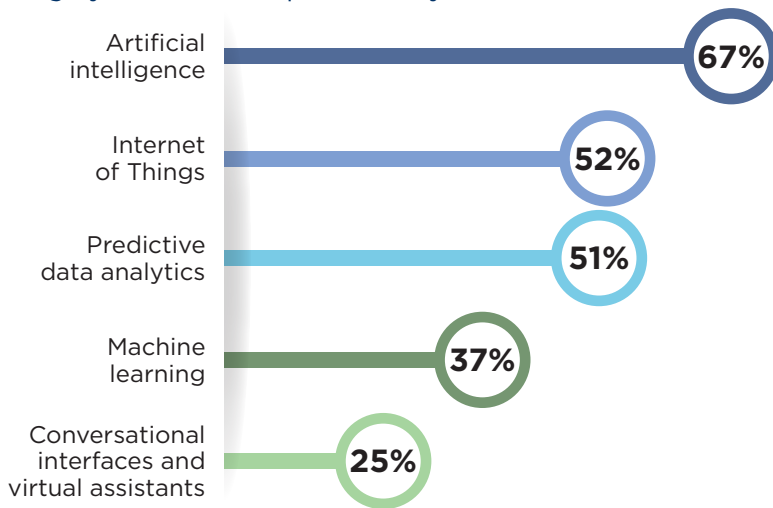
could boost efficiency and productivity, as well as increasing points of contact to address an explosion of citizen queries on everything from tax matters to Social Security benefits.

Our research suggests that federal leaders should increase focus on technology investments, workforce needs, and strategy—because these areas pay off in terms of outcomes.

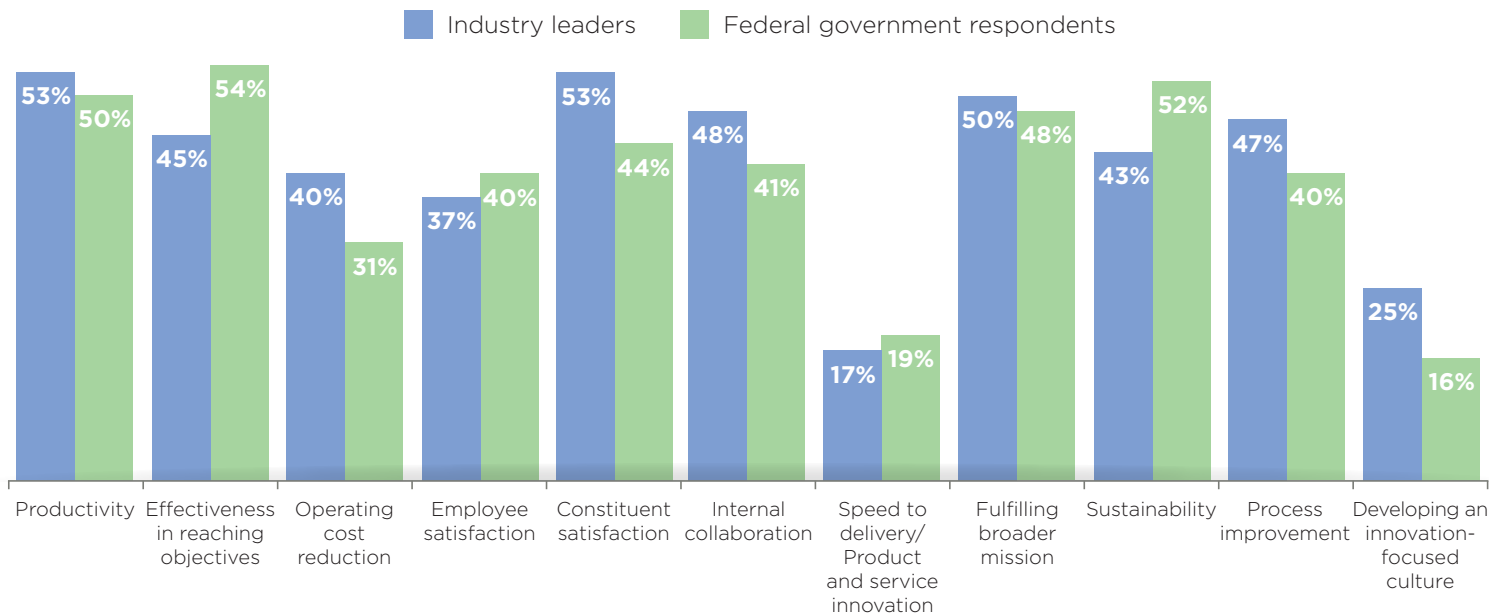
A select group of our total respondent pool (about 6% of the sample) have invested in artificial intelligence, developed culture and organizational purpose for their workers, and ensured all strategic and operational changes put stakeholder needs first. These leaders are 85% more likely to keep up with rapid changes in data regulation, report a 56% increase in productivity, and are 33% more likely to provide higher-quality products and services.

**Fig. 5: Has your agency implemented any of the following AI-enabled technologies?**

“Highly effective” responses only.



**Fig. 6: Federal agencies share similar traits with industry leaders.**



The takeaways for federal government decision-makers are clear: lean into successes satisfying constituents and operating more efficiently—areas where they have made significant strides—and take the next step to further support employees. Invest in reducing cybersecurity risk to build public trust in the privacy and security of the services they provide. The public sector is uniquely positioned to leverage emerging technologies to deliver valuable experiences to constituents—particularly through future disruptions.

To review how North American organizations are prioritizing and valuing their digital investments in the wake of constant disruption, read the full Innovation Index at <https://us.nttdata.com/en/engage/innovation-index>.