



Digital modernization



The top trends shaping government in 2023



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Summary

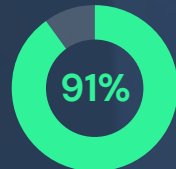
Government efforts to modernize saw substantial advancements in 2022: An overwhelming 91% of federal IT workers report their agencies gained ground on digital modernization efforts in the past year, reveals a survey of 500 federal employees in IT or tech-focused roles conducted by Wakefield Research on behalf of ICF.

To maintain the momentum of their digital modernization efforts, federal agency leaders should focus on cascading communication efforts that provide a common framework for every employee to get behind—with specific focus on enabling their Chief Data Officer (CDO) to act not only as a technological expert, but as an advocate for modernization and its many benefits. Fortunately, while many federal IT employees have experienced pitfalls along their digital modernization journey, they also recognize that smart investments—in technology and staff alike—can bring stakeholders together behind modernization.

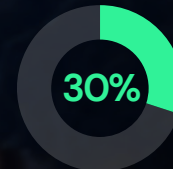
Federal agencies are gaining momentum, but many are still focused on the work that lies ahead. While 30% have reached the continuous improvement stage of their modernization journey, **70% are still working to meet their goals.**

Key findings

Digital modernization advancements

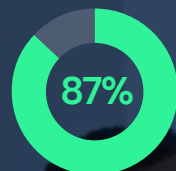


91% have advanced their digital modernization efforts in the past year



30% have reached the point in modernization where they are focused on continuous improvement

A culture of change

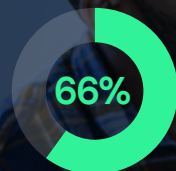


87% say staff embrace modernization efforts with optimism



85% agree leadership overstates their digital modernization progress

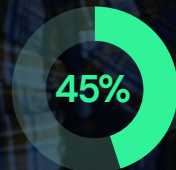
Trust in leadership



66% of those with CDOs say leadership makes decisions based on CDO recommendations



35% cite lack of a clear vision from leadership as a reason digital modernization efforts fail



45% cite consistent communication from leadership as the most impactful way to address resistance to change

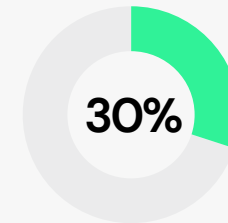
Federal modernization: Moving forward, with room to grow

Agencies advanced digital modernization efforts this year, marking a bright future if they can continue, as well as overcoming roadblocks they've encountered. Not only have 91% made gains, **30% report their agency has achieved major digital modernization goals and are now primarily focused on continuous improvement.**

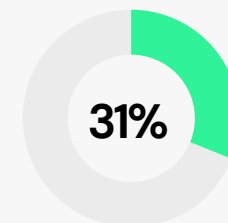
Many advanced along their modernization journey far enough to near continuous improvement: **Nearly 1 in 3 (31%) are executing digital solutions with enterprise support.** Perhaps most importantly, an overwhelming 87% say staff greet these solutions optimistically, important goodwill for federal leaders to capitalize upon and maintain their modernization momentum.

Employee optimism is especially important to maintain, **but unfortunately, 21% are integrating digital solutions sporadically with no support, and another 19% are struggling with multiple legacy systems and no enterprise support.** These legacy systems are no small consideration: 80% of federal IT employees have at least one, and in fact, 40% cite five and more existing programs or solutions that are not being regularly used by their agency. These are a burden as well as a missed opportunity: Zombie apps sitting on the shelf incur cost, even as they add to an ineffective and underused portfolio. But putting these valuable resources into action elsewhere via modernization could reap rewards with quick efforts.

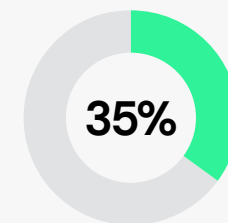
Federal IT workers identify a variety of reasons modernization efforts fail, including security concerns (41%) and inadequate risk management (38%). **But perhaps most troublingly, 35% point to a lack of clear vision from leadership, and nearly as many (33%) cite a culture that is resistant to change.** As federal agency leaders seek to advance digital modernization, their role increasingly requires them to advocate to the C-suite, as well as to employees across their organization, to explain solutions' value and encourage agency-wide buy-in.



have achieved major digital modernization goals and are now focused on continuous improvement.



nearly 1 in 3 are executing digital solutions with enterprise support.



point to a lack of clear vision from leadership.

Whose data is it anyway?

Without clarity and guidance, data—every agency’s most valuable asset—goes unused. **While data is primarily used to improve security (44%) and enhance productivity (40%), employees face challenges such as limited availability of data from other agencies (47%), a pain point that overshadows familiar frustrations such as overly siloed data (35%), and unorganized data (31%).** These affect CDOs and users alike, especially as data’s value makes it a prime target: Nearly half cite security issues including ensuring privacy protections for end users (47%) and ensuring overall data security (46%).

Agencies are also subject to rules and oversight that add to their workload and hinder the effective management and utilization of data. **More than 2 in 5 federal IT employees (41%) say that navigating regulations and compliance is a hurdle in dealing with their agency’s data**—a familiar story for federal leaders who have had to overcome these hurdles elsewhere, and focused on incremental gains both to meet these regulations as well as deliver meaningful benefits to their employees.





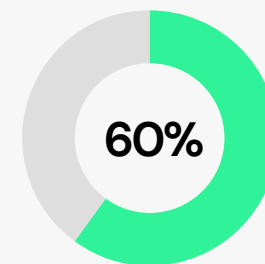
Rethinking the org chart

Technology and other investments make a huge difference in modernization efforts—but without a clear vision, trustworthy leadership, and agency-wide unity, goals will always be out of reach. This is all the more difficult given CDOs' typical standing at an agency: **Most federal IT employees (60%) report their CDOs answer to agency leadership rather than receive equal status.** As a result, more than a third of federal IT workers with CDOs (34%) feel their agency leadership makes decisions based on subjective judgment rather than CDO recommendations—flying in the face of data-informed decision-making practices.

As CDOs and other higher-ups consider their respective roles and duties, their employees are left looking for clear and authentic communication. **But 85% agree that leaders tend to overstate actual progress on their digital modernization plan.** This is perhaps in part a result of agency leaders' duty to speak to solutions enthusiastically, acting as advocates

for their digital modernization. Nevertheless, this disconnect belies a lack of clarity—and perhaps a lack of experience with the benefits of digital modernization that should be making employees' work easier.

For employees, personnel issues have not made digital modernization easier, with 94% of federal IT workers identifying concerns around staffing, especially technical issues such as limited knowledge of using digital solutions (48%), not having enough time to reskill (41%), and a loss of institutional knowledge (36%). **And beyond these big-picture problems, employees feel stress at the personal level: 35% say their current workload is causing burnout.** With another 39% struggling to attract qualified staff and 40% worrying that personnel leave for the private sector, federal leaders must overcome gridlock at the top in order to allay workers' fears and provide meaningful benefits for employees' day-to-day.

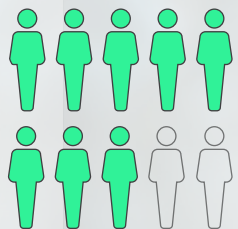


say CDOs report to agency leaders rather than receiving equal status

Legacy woes

Even apps suffer when leadership does not provide firm footing. **Among the 80% of federal IT workers who said there are existing programs or software solutions that may not be regularly used within their agency, 37% cite change in leadership or direction as a reason for sporadic use.**

If CDOs and other leaders can instead provide support for these apps—both by eliminating those that don't help, as well as realigning those that do—they can help extract value without bogging agencies down.



8 in 10 federal IT workers say existing programs or software may not be regularly used



Talking it out

Federal IT employees’ proposed solutions for stalled efforts reveal connections between communicating milestones and actually achieving them. **Consistent communication from leadership about agency modernization plans is the most cited solution to address resistance to change (45%)**, including from 53% of those who receive such communication on a consistent basis. Among federal IT workers who achieved modernization goals, nearly 2 in 3 (64%) say their leadership consistently communicates these plans—more than double their peers at agencies that have not yet achieved their goals (30%). **However, 42% of federal IT workers say leadership only periodically communicates updates about their agency’s modernization plan.**

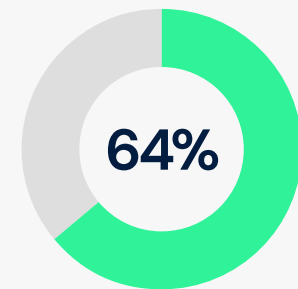
Another 17% reveal leadership shares system updates sporadically, which perhaps explains why digital modernization can frustrate employees: Opacity means they not only fail to understand what’s necessary to achieve digital modernization goals, but also why it’s necessary.

Fortunately, simple communication that engages employees and invites their participation in digital modernization can help repair these rifts. **Consistent communication from leadership (45%) that clearly articulates the benefits of adoption (43%) with established milestones (38%) are identified as some of the most impactful solutions for resistance to change.**

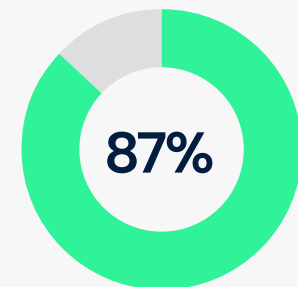
Open-minded employees

Digital modernization offers a lot to employees who recognize its value: **87% of federal IT workers say that agency staff views new modernization solution announcements optimistically.**

This jumps to 94% among those working in agencies that have reached modernization milestones, highlighting that making progress wins over employees and makes the most of their enthusiasm.



of federal IT workers at agencies that achieved their modernization goals say leadership consistently shares updates



say new modernization solution announcements are viewed optimistically by staff

Modernizing modernization

Federal IT workers say that adopting a cloud-based IT infrastructure (56%) is the most critical advancement their agency can take to modernize the IT environment, especially among GS-11 and above (61%) and at agencies with leadership who consistently communicate modernization plans (63%). Better data security (55%) is viewed as the top advantage of migrating over to the cloud, among the top-ranked benefits, followed by increased scalability (51%), more flexibility in accessing data (50%), and improved workflow (50%).

Similarly, a vast majority (82%) agree that it's impossible to modernize without using low-code/no-code solutions, including nearly half of those in agencies that have achieved their modernization plans (47%) who agree strongly. Improved efficiencies in processes/functions (46%) and allowing developers to work on in-depth projects (46%) are among the top three ranked benefits of implementing a low-code/no-code solution, followed by the ability to solve more complex challenges/create custom solutions (44%). Furthermore, migrating to the cloud and adopting low-code/no-code solutions can improve the bottom line: **Nearly half (47%) of federal IT workers cite infrastructure cost savings as a key benefit of cloud migration.** Another 40% point out that cost savings from low-code/no-code would be realized if their agency adopted these solutions.

Agency adoption of other advancements that could support IT modernization include AI or machine learning tools (41%), modern

collaboration tools (41%), and blockchain technology (40%). But regardless of the solution—be it low code/no code, AI/ML, or the cloud—federal agency leaders need to be aware of how their employees foresee adopting new solutions.

Top factors to consider when choosing technology for new modernization projects include the speed of implementation (50%) and compatibility with the current environment (49%)—details that leaders must consider with their own expertise as well as the knowledge base of trusted partners to make informed decisions.

Speed's importance in particular has seen a rise from 2021 (42%), especially at agencies that have achieved modernization milestones (57%, compared to 47% at agencies that haven't met targets). This speaks to agency leaders' duty to deliver strong benefits to their employees quickly, so the value of digital modernization becomes clear—thereby earning more trust and willingness to continue along the digital modernization journey.

Perhaps most interestingly, federal agencies are acknowledging that they can no longer advance their goals without trusted partners to support them. **Operating without third-party support (34%) is down from 2021 (50%), which suggests an openness to relying on expertise from outside consultants**—an opportunity for agencies and potential partners alike to capitalize on third parties' skills and abilities and build individual efforts into group achievements.



Over 4 in 5 agree:
It's impossible to modernize without using low-code/no-code solutions

Top considerations for new technology

Speed of implementation

50%

Compatibility with current environment

49%

Risk assessment in development

47%

Adjustable for future changes

46%

Intuitive for ease of use

45%

The core of modernization

Federal IT workers most cite increased security (58%) and reliability (54%) as top benefits of modernizing their agencies' IT environment. **These results mirror 2021 findings (increased security 57%, increased reliability 51%),** highlighting that much of how digital modernization occurs has changed, but core tenets remain in sight.

| | 2021 | 2022 |
|-------------------------------------|------|------|
| Increased security | 57% | 58% |
| Increased reliability | 51% | 54% |
| Improved culture of innovation | 46% | 49% |
| Improved usability for employees | 46% | 48% |
| Improved service delivery to public | 48% | 47% |
| Increased employee collaboration | 51% | 44% |



Conclusion

Establishing the right strategy and infrastructure can empower federal agency leaders to consistently communicate the priorities and benefits that help federal agencies build on their modernization momentum. Technical solutions, as well as proper governance, are integral to the future of federal IT—but so too is cohesive leadership working with their team and providing clear vision for what modernization is and what it can accomplish.

- Modernization can be driven by technological investments including cloud-based infrastructure (which 56% of federal IT employees say is crucial) as well as low-code/no-code solutions—which an overwhelming 82% agree makes modernization possible.
- Technological and cost benefits to modernizing the federal IT environment include increased security (58%) and increased reliability (54%), as well as cultural achievements: Creating a culture of innovation (49%), improved usability for employees (48%), and improved service delivery to the public (47%).
- Communication is a key cultural consideration, one that agency leaders need to make better use of in light of the alarming 60% who report their leadership does not consistently communicate about modernization efforts.
- Indeed, 45% of employees say consistent communication is the most powerful way to overcome resistance to change, making it the most popular solution for change management.
- As 70% work to advance their modernization goals, continuing to communicate and cultivate agency-wide unity behind modernization efforts can deliver these benefits.

Study methodology

The ICF Digital Modernization Survey was conducted by Wakefield Research (www.wakefieldresearch.com) among 500 federal employees, employed full-time, working in technology or IT-focused roles, between September 23rd and October 6th, 2022, using an email invitation and an online survey. Quotas were set for 250 GS 9 and 10 employees and 250 GS 11+ employees, and a minimum of 100 contract specialists and program managers.

Results of any sample are subject to sampling variation. The magnitude of the variation is measurable and is affected by the number of interviews and the level of the percentages expressing the results. For the interviews conducted in this particular study, the chances are 95 in 100 that a survey result does not vary, plus or minus, by more than 4.4 percentage points from the result that would be obtained if interviews had been conducted with all persons in the universe represented by the sample.



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