



Bring your mission to life with employee data

Workforce analytics puts facts behind modern workforce plans

Larger missions. Fewer resources.

The director of a large federal agency has poured over a workforce plan due at the end of the month that also has to balance with a shrinking budget. She knows at least 20 percent of the staff will be eligible to retire in the next year. Her agency is also in the middle of a digital transformation with pressing cybersecurity targets to meet. Both leave her with a list of unanswered questions, “How many employees have the digital and cyber skills the agency needs? How do we retain them? How many more will we need to fill the gaps now and in the future?”

Federal agencies face more, larger scope missions with fewer resources. At the same time, a near-critical shortage of employees with the right skills threatens the ability to deliver on future missions. Like this agency director, four out of five major federal departments and agencies struggle with staffing shortages, and three out of five do not fully understand their employees’ knowledge and skills.¹

Workforce information is critical to help leaders confront these workforce challenges. Since federal agencies traditionally do not prioritize human capital management, those that do likely do not have access to quality data, tools, and knowledge to use information to make valuable workforce decisions. This article presents ways **federal agency leaders and HR teams** can **use workforce analytics to make data-informed decisions to get ahead of skills shortages**. It also explores what **data, tools, methods, and knowledge** agencies need to effectively use workforce analytics.

Why modern government is important

Government agencies in the U.S. have to modernize in order to keep up with changing user needs, regulations, and health and public safety requirements. They’re behind. Some realize a modern government means rethinking the way they operate—revamping business and operating models so agencies are able to better deliver on their missions. This article is one of a series that features how modernizing affects the government workforce, the user experience, trust in the government agency, and the digital journey. The articles are intended to help guide governments in their modernization efforts to encompass all processes, technologies, policies, and the workforce so each works together to create connected, powered, trusted organizations.



¹ Source: “2020-2021 Impact Report,” Partnership for Public Service, (2022).





Data-driven insights can answer workforce questions

Spreadsheets and gut feelings are not enough for HR and department leaders to reach recruiting, retention, and productivity goals for which they are accountable in modern governments. Workforce analytics can provide valuable information to help reach these goals and **avoid future workforce challenges**. Through our work in the public and private sectors, we have seen workforce analytics help leaders analyze the right data to **understand current workers' skills, identify and close gaps**, and **plan their future workforce** to support their strategic plan. Workforce data also provides valuable insight into HR initiative effectiveness and how talent management trends impact agency strategies and results.

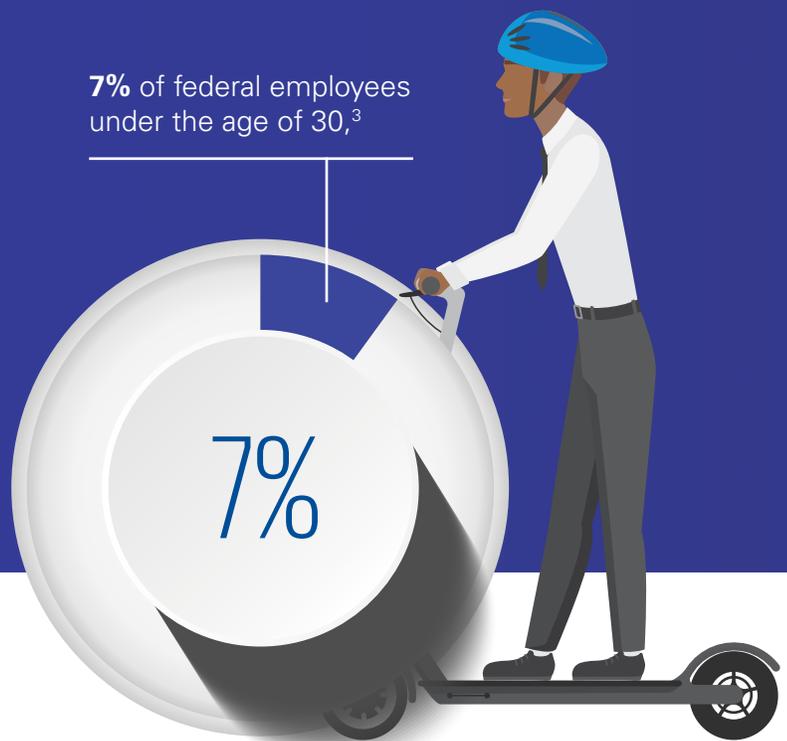
Anticipate workforce needs

Effective analysis enables leaders to identify and place the **right people** with the **right skills**, from inside or outside the agency, when and where the agency needs them most. According to the Office of Management and Budget in 2020, 600,000 federal workers will require upskilling. Most agencies need to reskill or hire employees to build three modern capabilities: **digital technology** including cloud, artificial intelligence, and automation, **digital thinking** that includes interpreting data and real-time analytics, and **digital leadership** to motivate and develop these employees. Analytics can help determine how many current employees have the skills needed to meet the mission and how many people with what skills the agency will need to fill the gaps. Considering extensive cybersecurity requirements, **measuring the impact of digital and cybersecurity training** can be valuable. Agencies can do this by reviewing employee performance indicators and behaviors over time following training. Read more about how to build a [government workforce for the digital era](#).

Workforce Analytics Defined:

Workforce analytics is an advanced set of data analysis tools and metrics for broad workforce performance measurement and improvement. It analyzes recruitment, staffing, training and development, personnel, and compensation and benefits, as well as standard ratios that consist of time to fill, cost per hire, accession rate, retention rate, add rate, replacement rate, time to start, and offer acceptance rate.

² Source: KPMG Modern Government "Workforce Analytics," Information Technology Gartner Glossary, (2022).



Workforce analytics uses employee data to analyze what happened in the past and anticipate future individual behavior. With 28 percent of federal employees eligible to retire within the next five years and only about 7 percent of federal employees under the age of 30,³ agencies have a growing gap to fill. Human capital management tools allow leaders to predict which employees might retire, when, and address talent gaps they will leave while there is time to prepare.

When agencies need to ramp up external recruiting, workforce analytics can help agencies hire higher quality employees suited for roles faster while also helping reduce cost per hire. The latest average cost per hire for all industries and positions is \$4,425⁴ making each hire a strategic investment. With shorter time to recruit and onboard, new employees can become productive faster, which typically boosts employee satisfaction.

Putting DE&I in place today is critical for building a modern future federal workforce. Seventy-six percent of employees and job seekers who responded to a recent Glassdoor survey said a diverse workforce was important when evaluating companies and job offers.⁵ And HR listens.

Eighty-one percent of talent acquisition and HR leaders agreed their focus on recruiting and hiring diverse candidates has intensified since the onset of COVID-19.⁶ With the right data, agency leaders can **further DE&I initiatives**. The U.S. Airforce's new DE&I effort uses data-driven approaches to attract, develop, and retain diverse aircrews, starting with the youth.⁷

Retain your team

Workforce analytics puts science behind employee satisfaction to help HR and leaders **determine what employees want and need** without having to observe and guess. Leaders need to understand *why* employees might leave their agency in addition to predicting the number, for example, so they can make changes that could entice them to stay. By combining employee survey, productivity, performance, absenteeism, attrition, and other data from keystrokes to employee sentiment, leaders can gauge how committed employees are to their work and organization. In the private sector, Google **cut attrition among mothers by 50 percent** after enhancing parental leave policies when analysis found the troubling attrition trend.⁸ With access to updated employee data, federal agencies can explore similar approaches.

The right data equips leaders with knowledge to **create work environments in which employees feel like they belong**. For example, Microsoft explored the impact of **talent mobility on employee retention and engagement**. When analysis showed employees with recent internal job transfers were more engaged, the company simplified its job transfer process.⁹ Engaged employees are more satisfied. They tend to express more positive views of their organization and deliver higher service levels so customers have a better experience.

³ Source: The President's Management Agenda, (November 2021).

⁴ Source: Society for Human Resource Management, "SHRM Customized Talent Acquisition Benchmarking Report," (2017).

⁵ Source: Jennifer Miller, "For younger job seekers, diversity and inclusion in the workplace aren't a preference. They're a requirement." The Washington Post, (February 18, 2021).

⁶ Source: The Conference Board, "Transforming Talent Acquisition, Onboarding, and Internal Mobility," (October 13, 2021).

⁷ Source: Scott Maucione, "Air force trying to diversify its largely white, male pilot corps with new strategy," Federal News Network, (March 30, 2021).

⁸ Source: Fortune, "The 100 Best Companies to Work For," (2017).

⁹ Source: Kaur, J., & Fink, A.A., "Trends and practices in talent analytics," Society for Human Resource Management (SHRM)-Society for Industrial-Organizational Psychology (SIOP) Science of HR White Papers Series, (2017).



Start with the right facts; how to analyze them

In the past, HR information technology focused on how to store data and keep it safe. Challenges modern agencies face require more. With U.S. unemployment at historic lows, people with sought-after skills have their choice of public and private sector jobs. HR and agency leaders need to gather and learn from the right HR data and use it to build a workforce that can move missions forward.

Access to the right data, analytics tools, and methods provide line of site and analysis leaders need to evaluate, plan, predict, or fulfill most any workforce-related need. To provide data access, many agencies will need to integrate ERP, payroll, and other systems that contain employee data.

Integrated systems, AI, and automated processes with machine and deep learning platforms allow agencies to pull and analyze information so it is meaningful. Technology uses modeling and other analysis techniques to identify employee data relationships and what drives trends. In the opening example, the agency director could learn about a new private sector company opening in the area that could compete for her talent and would have the data to react to retain staff and compete for workers.

Many agencies have long cultures of operating independently. Data reflects this culture. Integrating systems allows agencies to **share data and collaborate to make data-driven decisions valuable to multiple agencies**. By 2023, 50 percent of government organizations will establish formal data sharing accountability structures, including standards for data structure, quality, and timeliness.¹⁰ When all agencies standardize and structure data in the same way, no matter what platform agencies use each will access the same quality data for more accurate, timely, and powerful decision-making.

Successful workforce analytics hinges on **choosing the right analytical approach**. HR and other leaders often struggle to understand employee data and how to use it to help deliver on the mission. The biggest challenges are inefficient

data use, not understanding the data, and asking the wrong questions about the data. While workforce analytics is easier with modern tools, agencies need people with knowledge of data analytics, reporting, and technology to choose the approach and use the right insights in the right ways. Leaders and HR professionals also need to **understand how to use their human capital management tool and the analysis it provides**. Together, teams can:

- 1. Gather correct data.** Only high-quality data are useful. Understanding the need and analyzing existing data will help determine what data you need.
- 2. Invest in technology.** The correct data software will store and cleanse large amounts of data from multiple sources. The software will also create reports based on historical and predictive models. There are many leading human capital management tools from which to choose. Some major features to look for include:
 - Cloud-based with modern technology capabilities including AI, automation
 - Latest security, privacy, compliance, and governance capabilities to help prevent errors, breaches, and abuse
 - Standard and customizable dashboard and reporting
 - Easy to use for positive user experiences
- 3. Develop plans that address and correct problems data identifies.** With the right technology solution, HR and other leaders have confidence in data to create strategic, ethical, actionable plans.
- 4. Make decisions on the analysis results.** Easy-to-use dashboards and reports provide instant, relevant data to help leaders make effective decisions faster.

¹⁰ Source: Gartner, "Gartner Identified Top 10 Government Technology Trends for 2021," March 29, 2021).



Use your data now

Workforce challenges grow more complex and data quantities that can address them are exploding, but federal agencies have been slow to implement workforce analytics. The right data, analytics tools, and knowhow can help agencies through the current workforce crisis and prepare for the future. We encourage agency leaders to evaluate how a deliberate and informed workforce analytics approach can help your organization. The first steps for most organizations address:

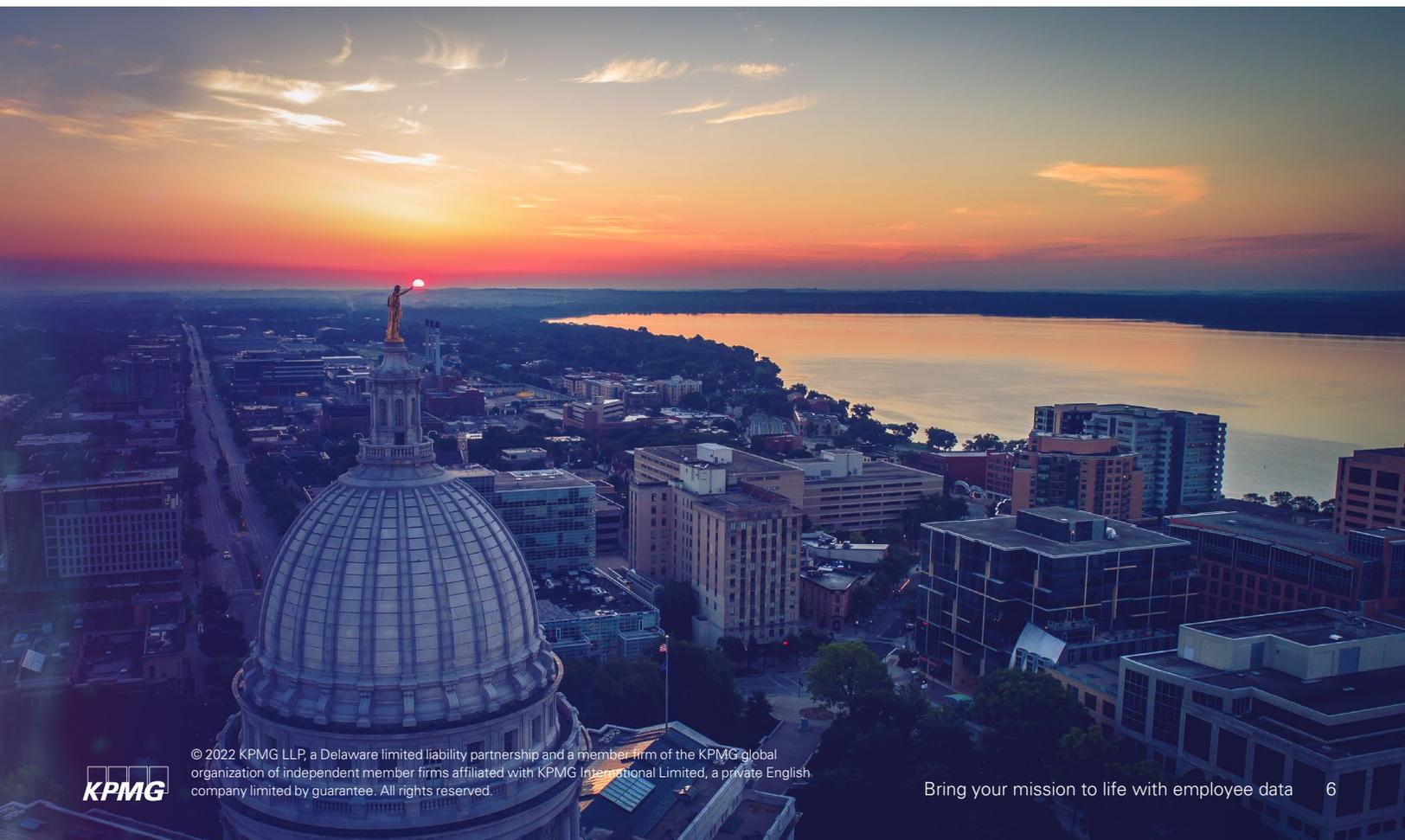
- **Processes:** Examine workforces process for which ones work and what processes need to be modernized
- **Data:** Identify, inventory, and understand the valuable employee data your organization has; examine data quality
- **Technology:** Connect the systems that house employee data and invest in a modern human capital management tool
- **Analysis:** Identify agency's objectives and most pressing needs; use valuable data to drive evidence-based workforce trend decisions, shape employee experience, and foster organizational health and performance
- **Plan:** Create a plan with measurable objectives to address gaps and engage a trusted provider

Government agencies may need to invest in new technology, acquire critical skills, or reshape the employee experience and workforce culture. Our HR consultants understand these challenges and opportunities by working with government leaders every day. We deliver the experience, research, and industry expertise organizations need to define the future of modern HR. It's a digital world, but people still make it turn. People will remain your most important investment and critical to delivering your mission.

About KPMG

KPMG has worked with federal, state, and local governments for more than a century, so we know how agencies work. Our team understands the unique issues, pressures, and challenges you encounter in the journey to modernize. We draw on our government operations knowledge to offer methodologies tailored to help you overcome these challenges and work with you from beginning to end to deliver the results that matter.

The KPMG team starts with the business issue before we determine the solution because we understand the ultimate mission. When the way people work changes, our team brings leading training practices to make sure your employees have the right knowledge and skills. We also help your people get the best out of technology while also assisting with cloud, advanced analytics, intelligent automation, and cybersecurity. Our passion is to create value, inspire trust, and help government clients deliver better experiences to workers, citizens, and communities.



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