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WORKFORCE AUGMENTATION

MARKET RESEARCH PACKET

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# WORKFORCE AUGMENTATION IN THE GOVERNMENT

## Background

The public sector is a fast-changing industry, and so is its workforce. Covid-19, artificial intelligence, and changing societal priorities are all factors that are shaping the future of the workforce. Workforce augmentation refers to the ways in which the workforce is being reimagined through AI, upskilling and training, and human capital initiatives.

## Challenges

There are a few challenges facing the public sector that workforce augmentation initiatives aim to alleviate:

### Skill Gaps

Rapid changes to the role of the public workforce are leaving many current workers undertrained. IBM has predicted that [120 million jobs globally will have to be retrained before 2025](#), but only 50% of organizations have skill development strategies in place. The government is under pressure to keep up with these automation transformations and will need to start assessing and addressing existing and future skill gaps in employees.

According to the [GAO](#), the highest-risk skill gap in cybersecurity, because it leaves government agencies vulnerable to cyber-attacks. The increasing interconnectedness and reliance on digital technologies are leaving government systems vulnerable to cyber threats from foreign adversaries, non-state groups, hacktivists, and other malicious actors. Cybersecurity experts play a vital role in protecting national security by defending government networks, critical infrastructure, and sensitive information from cyberattacks and growing skill gaps leave system at risk.

### Return to Office Hesitance

Government offices need to re-evaluate the benefits and intentions of requiring in-office work experience. [The overwhelming majority of employees, federal and non-governmental, are resisting going back into the office.](#) Making practical changes such as hybrid work, mentoring opportunities, and reskilling options from a distance will help with upskilling and retaining top talent. There will likely be some redesigning around secure-telework policies, so they change role to role and do not rely on a one-size-fits-all approach.

Remote work requires more cyber awareness from employees. At home offices, unauthorized people gaining access to confidential documents are at risk, and phishing scams can be more effective to a person working from home. These issues can be mitigated by providing proper training.

### Managing “Perma-crisis”

Our world today feels like we are in constant crisis. There was COVID, an impending recession, and the Ukraine war. This state of perma-crisis requires creativity and agility from our government. To

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accomplish this, leaders will be required to listen to employee preferences like supporting wellness, creating a work-life balance, and bridging cultural divides.

### Staff Shortages

The US labor force participation rate has been falling, and organizations are having trouble retaining the number of staff required to complete their jobs. More than one third of government workers are planning to leave their jobs [in the next 12 months](#). Largely cited to be because of burnout, low pay, and lack of upward mobility. Because the federal government is facing so many challenges with recruitment, the current employees have too much on their plates, and it is exasperating the issue.

When asked how the staff shortage was affecting the workload of current, [employees answered](#):

- 82% covering for a workload that does not fall under their responsibilities
- 45% helping others learn on the job
- 35% training new hires
- 23% recruiting challenges

The pandemic drastically altered the government workforce. According to the Bureau of Labor Statistics, the public sector lost 600,000 workers in 2020, and has not yet recovered. This shortage is affecting the delivery service of agencies, as they do not have enough people to execute on their jobs.

### Solutions

There are a variety of solutions being leveraged to solve these challenges:

#### Artificial Intelligence

Artificial Intelligence (AI) is an increasingly hot button issue. AI capabilities are expanding, and its presence in the workforce is becoming commonplace. Although AI is becoming more valued, it is still misunderstood by the public and employees. There are ethical concerns about bringing AI into the workforce, such as the fear that AI will replace workers. However, according to [McKinsey](#), about 95% of jobs cannot be completely automated. It is best if we find ways to integrate AI into the workforce, and not shy away out of fear.

By integrating AI into the workplace, agencies will be able to be more efficient, cost effective, raise employee satisfaction, and improve their output. The total benefits of AI contributions are hard to anticipate, however agencies are working on ways to integrate AI for more efficiency, such as:

#### Federal AI Initiatives

Agency	Description
<b>Army</b>	The Army has the largest database of thermal face pictures in the world and is using this in conjunction with AI to identify people in the dark.
<b>Internal Revenue Service</b>	In 2018, the IRS signed a seven-year deal with Palantir Technologies to automate detecting tax fraud that would have previously been done by agents. That year, this technology was able to spot 296 instances of fraud, 84 of these were not detected by agents without the tech.

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<b>Department of Homeland Security</b>	DHS uses automated tools that can scan news to pick out relevant facts about emerging tech that is relevant to homeland security. These are solutions geared toward identifying strategic forces.
<b>The National Oceanic and Atmospheric Administration</b>	The National Oceanic and Atmospheric Administration (NOAA) is using AI to improve environmental monitoring and weather prediction. The Satellite and Information Service (NESDIS) signed a three-year agreement with Google in 2020 for researching AI and ML solutions. The goal is to come up with ways for NOAA to leverage large amounts of environmental data for accurate predictions.
<b>National Institute of Health</b>	The NIH is seeking to make its wealth of data usable with AI. From electronic health record data, omics data, imaging data, disease-specific data, and beyond, NIH is poised to create and implement large and far-reaching applications using AI and its components. AI adoption will set the stage for using data analysis in conjunction with ML to make advancements in biomedical science.

State Initiatives

State	Description
<b>California</b>	CA has started replacing legacy systems at the DMV with RPA bots that can interact with customers. The 50 bots have saved California DMVs \$8.8M and free up employees to focus on more complex tasks. ( <a href="#">Source</a> )
<b>Hawaii</b>	Hawaii's unemployment rate hit 20% in April 2020 because of the pandemic. The state's unemployment insurance system was overwhelmed, and citizens could not access the services they qualified for. So, the state created the Hawai'i Career Acceleration Navigator, which leverages AI to connect job seekers with employment insurance services. The program has been successful and has resulted in 1,094 total users, 1452 clicks to apply for jobs, 2,288 clicks to explore new career pathways. ( <a href="#">Source</a> )
<b>Tennessee</b>	TN has been able to automate 100,000 hours of work per year through 12 agencies with robotic process automation. The goal is to automate 200 more processes within 23 agencies by 2024, alleviating 250,000 hours of automated work. ( <a href="#">Source</a> )
<b>New York</b>	The NYC Metropolitan Transportation Authority (MTA) is now using AI video technology to find violators of the transit only lanes. This takes away the need for enforcers to be out there in person to write tickets. The technology is in the preliminary stages of adoption and is currently installed on 300 buses. ( <a href="#">Source</a> )

## Data Management

Data management solutions can also be leveraged for workforce augmentation purposes. Agencies usually require case management, accounting, financial management, training, survey, and data sharing/collaboration solutions to fulfil their missions; and the type of solutions they chose will change their workforce.

**Office of Personnel Management:** OPM has updated their [data strategy](#) 2023-2026 plan to include data solutions that will create a remote-work savvy workforce. It calls for data investments in cloud-based analytics, AI, and cross-agency collaboration. OPM is tasked with recruiting, hiring, training, and retaining 2 million federal employees, and therefore will be acquiring a state-of-the-art Enterprise Human Resources Integration data platform.

Over the course of three years, OPM will be establishing a single data infrastructure to house and analyze all government workforce data. The goal is to create a workforce with strong data capabilities, establish protocol, and create high quality reports. The strategic plan includes a requirement for agencies to assess data to find opportunities to increase staff data skills.

## Paperless

More agencies are looking into going **paperless** for time and cost savings. Aside from being tedious, paper forms are costly. Excessive working hours, bottlenecks, and materials are not inexpensive. For example:

- The manual process costs an estimated \$117B to citizens and agencies \$38.7B annually.
- From August 2021 – August 2022, there were over 106 billion forms processed, and 9,858 unique forms.
- \$1.3 billion was spent per year on employee printing in 2009.
  - \$440M of this was unnecessary.

In 2022, 10.5 billion hours were spent by citizens on government paperwork. These complicated and tedious forms can be reduced in time filling them out and government turnaround by digitization. For example, submitting taxes by paper takes 4-6 weeks (about 1 and a half months), and submitting electronically takes 21 days (about 3 weeks) or less.

## Human Centered Design

Agencies need to change their approach to focusing on people if they hope to retain top talent. This includes being intentional about creating diverse, inclusive spaces, incorporating tech savvy solutions, and allowing flexible working environments.

## Recruitment

Federal and state agencies are looking at different ways to recruit and train new employees. They are adding more perks to employment offers, such as student loan reimbursement, at home office stipends, and considering healthcare and retirement benefit more. For example, OPM hosted a recent [recruitment event](#) to bring on some of the private sector employees affected by the recent layoffs in the tech industry. There is not currently data being collected on the results of OPM events, however there were about 1,800 recruits talking to more than 50 government agencies. The fact that OPM is hosting these meetings shows that they are committed to new ways of recruitment.

They are recruiting by building relationships with universities, creating student summer programs, and engaging with gen z on social media. Only 1.6% of the federal workforce right now is Gen Z. This is far too low and will become a more noticeable problem as the current workforce ages out. Federal departments are investing into their relationships with universities, career coaches at the universities should all understand how to apply to federal jobs, and getting students interested in the perks of federal opportunities early is important, hence the summer programs. Hiring more entry level jobs, not just experts, should also be an initiative in departments. Federal opportunities are also being posted more and more to sites like LinkedIn, so people are not required to go out of their way to USA.gov to apply.

### Diversity Initiatives

In order to build an inclusive workforce, federal agencies must hire people with diversity in mind. This is currently being done through affirmative action, Equal Employment Opportunity (EEO) Programs, diversity and inclusion training, diversity recruitment and outreach, employee resource groups (ERGs), and other leadership development programs.

- **The Office of Personnel Management:** Created a Recruitment, Engagement, Diversity, and Inclusion [roadmap](#) to increase inclusivity in the workplace. It is an informative packet for other federal agencies who are looking to improve diversity. They are partnering with federal agencies to improve the way the government attracts, recruits, and hires new talent. They are also analyzing data from USAJOBS, USAStaffing, and the Enterprise Human Resources Integration databases to assist agencies with strategic recruitment efforts.
- **Chief Diversity Officers Executive Council:** The Biden administration [launched the first Chief Diversity Officers Executive Council](#). They are in charge of implementing diversity strategy across the federal government. They will be improving collaboration, assisting agencies, and establishing clear benchmarks and metrics for DEIA standards.

## Legislation and Agencies

### Presidents Management Agenda

Biden-Harris [President Management Agenda](#) consists of 4 pillars, and the 1<sup>st</sup> one is “Strengthening and Empowering the Federal Workforce”. Their goal is to direct federal agencies into attracting, hiring, developing, and empowering individuals to assist agencies with fulfilling their missions in the short and long term. They will accomplish this by fulfilling four strategies:

- Attract and hire the most qualified employees, who reflect the diversity of the United States.
- Make all federal jobs a good place to work, where employees are engaged, supported, heard, and empowered. Employees will be given opportunities to learn, grow, and join unions.
- Reimagine and create a strategy for the future of federal work informed by lessons by the pandemic and workplace trends.
- Build a personnel system and support required to sustain the federal government and agency missions.

Progress will be updated periodically [here](#).

Executive Order on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce [This EO](#) was passed by the Biden-Harris administration in June 2021. Its goal is to improve diversity in the federal workforce. It is the government's responsibility to advance diversity and inclusion, and to achieve this, it will be taking the following steps:

- The Director of OPM and Chair of Equal Employment Opportunity Commission (EEOC), as well as other federal experts shall: establish federal-wide programs to expand the scope of diversity, establish a strategic plan, define standards for diversity, equity, and inclusion.
- The Executive Departments and Agencies shall include a plan for improving diversity within their agencies as part of every strategic plan. These plans should be data driven.
- Internships shall be paid.
- Agencies shall create opportunities for all employees to learn more about the importance of diversity in leadership. Training programs will equip employees with knowledge of institutional racism and bias against underserved communities.

#### Workplace Innovation Lab, General Services Administration

The Workplace Innovation Lab is within the GSA and showcases advancements in office design and technology to fit the needs of hybrid workers. Individuals and agencies can make an appointment to see it to test out the workplace technologies.