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WHITE PAPER

Revolutionizing the Government Workforce With AI

Discover how artificial intelligence is transforming public sector agencies and empowering a future-ready workforce.

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Introduction: AI and The Government Workforce

As public sector agencies face mounting pressures — from workforce shortages and limited budgets to the need for rapid service delivery and greater impact — artificial intelligence (AI) has emerged on the scene as a critical tool to meet these challenges. Agencies, especially those relying on outdated technology infrastructures, are in dire need of solutions that can streamline employee operations while improving accuracy and service quality.

This white paper explores how innovative AI-driven technologies are revolutionizing the government workforce in areas such as field operations, workflow automation, budgeting, and resident assistance. We address key questions including:

- How can AI enhance operational efficiency and decision-making in government agencies?
- What strategies can agencies adopt to overcome the challenges of legacy systems and resistance to AI implementation?
- What are the financial and resource allocation benefits of integrating AI into government operations?

We highlight the potential of AI to not only alleviate these challenges but also to future-proof government services for the next generation of workers.

Current Trends in Workforce, AI, and Automation

The public sector is undergoing significant shifts as baby boomers retire and Generation Z enters the workforce. In 2024, Gen Z is expected to surpass baby boomers in full-time employment[1], bringing with them an expectation for modern, technology-driven work environments.

Concurrently, government agencies are grappling with increasing volumes of data, tightening budgets, and a greater demand for efficient decision-making. Agency leaders are seeing AI as a promising solution to these challenges.

According to Gartner® research[2], "By 2026, more than 70% of government agencies will use AI to enhance human administrative decision making and will measure the productivity increases achieved that way." The research further notes, "By 2026, more than 60% of government organizations will prioritize investment in business process automation, up from 35% in 2022."

We predict that agencies adopting AI will not only keep pace with these challenges but also set new government benchmarks for operational efficiency and fiscal management.

1. Glassdoor Economic Research, "Glassdoor's 2024 Workplace Trends," Aaron Terrazas, November 15, 2023, https://www.glassdoor.com/blog/workplace-trends-2024/#Trend1
2. Gartner, Top Technology Trends in Government for 2024, Todd Kimbriel, Ben Kaner, et al., March 20, 2024

Why AI Is Essential for Modernizing Government

While generative AI's promises (and concerns) have captured headlines in the past year, practical and safe applications of AI and machine learning have been in use in government for years.

As our experience implementing AI solutions with leading states, counties, and cities shows, AI is increasingly crucial for modernizing government operations and addressing the triple threat of workforce shortages, rising service expectations, and budget shortfalls. For example, by integrating AI into field operations, document processing, and budgeting, agencies have demonstrated significantly enhanced efficiency, accuracy, and staff satisfaction while optimizing resource allocation.

The successful adoption of AI can ensure that government agencies and departments are not only able to maintain current service levels but also improve them in the face of growing workforce demands and budget constraints.

4 Key Modernization Issues Facing Agencies

Government agencies today face several critical challenges as they strive to modernize their operations. These issues, deeply intertwined with both technological and organizational factors, pose significant obstacles to achieving efficient, future-ready public services. Understanding and addressing these challenges is essential for agencies seeking to leverage AI and other advanced technologies effectively.

Issue 1: Workforce Transition and Knowledge Loss

With the retirement of baby boomers, government agencies face the risk of losing critical institutional knowledge. This transition creates a gap that is challenging to fill, especially if agencies rely on outdated, paper-based processes. The result is a slower onboarding process for new employees and the potential for decreased service quality.

Issue 2: Legacy Systems and Resistance to Change

Many government agencies still operate on legacy systems that are incompatible with modern AI technologies. The integration of AI requires not only technological upgrades but also cultural awareness within the organization. Some employees are emotionally tied to the older systems they currently use. Resistance to change can impede the successful implementation of AI, leading to wasted resources, unmet expectations, and delayed impacts.

Issue 3: Data Privacy and Security Concerns

As AI systems handle large volumes of data, there is an inherent concern about data breaches and privacy violations. Governments must ensure that their AI solutions comply with stringent data protection regulations to prevent any misuse or loss of public trust. Failure to do so could result in legal repercussions and damage to the agency's reputation.

Issue 4: Budget Constraints and Resource Allocation

Limited budgets are a significant challenge for many government agencies, making it difficult to invest in new technologies. Traditional budgeting methods often fail to prioritize spending effectively, leading to underfunding of critical programs. While AI-driven budgeting offers a solution by aligning financial resources with community priorities, its adoption requires overcoming the inertia of established practices and the fear of potential disruptions.

4 Targeted AI Solutions for Augmenting the Workforce and Decision-Making

AI technology offers powerful tools to address the workforce and organizational challenges facing government agencies. By implementing AI solutions, agencies can enhance worker efficiency and improve decision-making processes. Here are four targeted AI-driven solutions that are delivering on the promise of transforming public sector operations.

Solution 1: AI-Driven Mobile Field Operations Platforms

Implementing AI-driven mobile field operations platforms can transform the monitoring, compliance, and enforcement of fieldwork by automating data collection, analysis, and reporting. These platforms reduce inspection times from hours to minutes, as seen in the New Jersey Department of Environmental Protection's success, where individual inspection times decreased from two to three hours to just 10 minutes. This solution allowed seven inspectors to conduct more than 9,500 in-person inspections in one year.

Solution 2: Automated Document Processing Systems

AI-powered document processing systems can address the issue of backlogs by automating the classification and extraction of data. For instance, Tarrant County, Texas, reduced their e-filing workflow intake period from days to minutes, allowing for 24/7 document processing. In Florida, Palm Beach County realized $1.9 million annual savings in data entry. Automated document processing not only saves time and money but also improves accuracy, staff satisfaction, and service delivery.

Solution 3: Priority-Based Budgeting With AI

Priority-based budgeting, supported by AI and machine learning, enables agencies to make informed decisions by linking financial resources to strategic priorities. Priority-based budgeting solutions that harness AI are able to help governments by analyzing complex budget data to uncover inefficiencies, drive new funding models, and reallocate resources to areas of greatest need. Washington County, Wisconsin, serves as a compelling example, where priority-based budgeting enabled the reallocation of nearly 15% of the county's operating budget, transforming a department in parks and recreation into a fully self-sustaining entity.

Solution 4: AI Virtual Assistants

AI virtual assistants leverage the latest advances in generative AI to create a seamless connection between residents and agency services. These assistants go beyond traditional chatbots by deeply integrating with agency systems, providing a true assistant experience. By automating common inquiries and facilitating easy, 24/7 access to government resources, they significantly reduce the workload on call center staff, leading to cost savings and enhanced productivity.

Future-Proofing Government Operations

AI represents a powerful tool. In the short term, agencies can overcome workforce challenges with fewer resources. Furthermore, AI solutions take on the mundane, repetitive tasks, freeing employees to focus on more fulfilling work. Long-term, AI solution adoption future-proofs agencies by enabling continuous improvement in service delivery, thus ensuring higher public trust and engagement.

Success stories make a compelling case for widespread implementation. Successful AI implementation requires a phased approach, starting with stakeholder engagement and pilot programs. Key stakeholders, including IT leaders and frontline staff, must be involved early to address potential resistance and ensure smooth integration.

For agencies still on the sidelines, the time for consideration is now. Governments must begin to embrace AI to meet the workforce demands of tomorrow's public sector while ensuring efficient, transparent, and priority-driven use of public resources.

Additional Resources

For additional insights for government leaders, visit Tyler's Resource Center. If you would like more information about Tyler solutions, contact us at info@tylertech.com or visit tylertech.com.

About the Authors

Chris Fabian is the senior director of product strategy for ERP budgeting at Tyler Technologies. As co-founder of ResourceX, which was acquired by Tyler in 2023, Chris has helped more than 300 schools and local governments implement priority-based budgeting. Tyler's Priority Based Budgeting, powered by ResourceX, is a budgeting application that leverages machine learning and AI to predict and identify priority-based budgeting opportunities.

Vivek Mehta is a vice president and general manager with the Platform Solutions Division at Tyler Technologies. Prior to joining Tyler, Vivek held several leadership positions in software development and consulting services, including founding and leading the AI-powered field services startup, ARInspect. Tyler's Augmented Field Operations, powered by ARInspect, uses advanced AI and machine learning to transform the monitoring, compliance, and enforcement of fieldwork.

Henry Sal is senior director of AI automation technology for Tyler Technologies. Henry co-founded Computing Systems Innovations (CSI), a leading artificial intelligence automation, redaction, and indexing solution, which was acquired by Tyler in 2023. With extensive experience in software development and system design, Henry has led complex IT projects for government entities and major corporations. Tyler's CSI solution speeds up document processing time, expedites workflows, and reduces errors.

ABOUT TYLER TECHNOLOGIES, INC.

Tyler Technologies (NYSE: TYL) is a leading provider of integrated software and technology services for the public sector. Tyler's end-to-end solutions empower local, state, and federal government entities to operate efficiently and transparently with residents and each other. By connecting data and processes across disparate systems, Tyler's solutions transform how clients turn actionable insights into opportunities and solutions for their communities. Tyler has more than 44,000 successful installations across 13,000 locations, with clients in all 50 states, Canada, the Caribbean, Australia, and other international locations. Tyler has been recognized numerous times for growth and innovation, including on Government Technology's GovTech 100 list. More information about Tyler Technologies, an S&P 500 company headquartered in Plano, Texas, can be found at **tylertech.com**.

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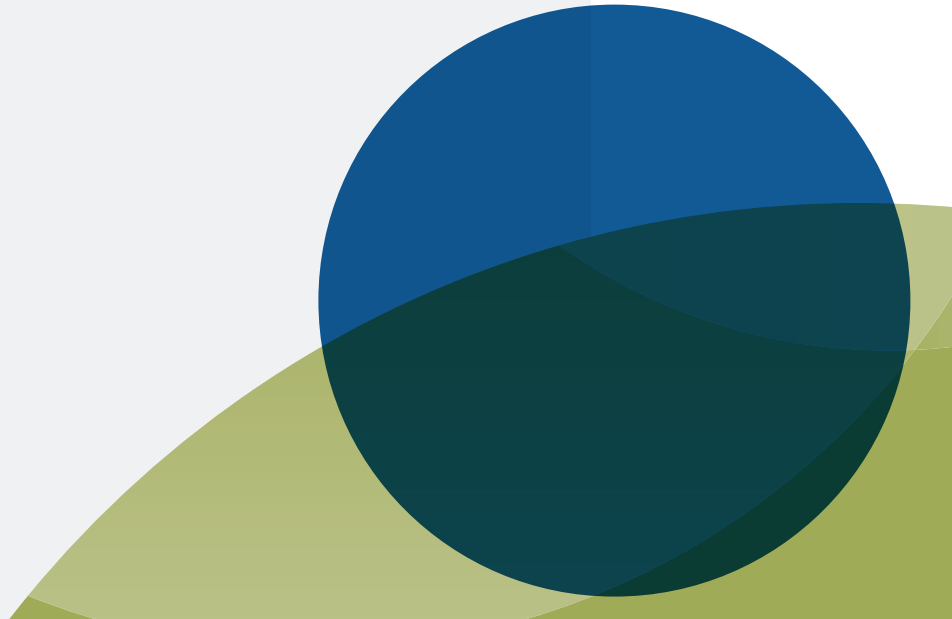

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