

MANAGING GOVERNMENT PROGRAMS IN THE AGE OF AI: A WHITE PAPER



Applying SAFe(r) Principles to Deliver
Mission-Driven AI Outcomes

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EXECUTIVE SUMMARY

Incorporating AI is now as mission-critical as cybersecurity was a decade ago. The pace of AI adoption across government is accelerating, and leaders face a stark choice: implement AI with intention, or risk wasted investments, ethical lapses, and national security vulnerabilities. For agencies, the question is not whether to use AI, but how to govern it so that it delivers measurable mission value.

This paper demonstrates our expertise in managing AI-enabled programs within government environments. Drawing on industry best practices and our proven approach, we show how Scaled Agile Framework (SAFe) principles, coupled with strong governance, enable agencies to deliver secure, transparent, and effective AI outcomes. For government leaders, this means faster delivery of mission value, measurable improvements in compliance and accountability, and confidence that AI programs are aligned with strategic priorities.

INTRODUCTION

Government agencies and program leaders are under immense pressure to integrate AI into mission-critical operations. Our purpose is to show how our approach to program and portfolio management ensures government customers can successfully and securely manage AI initiatives. We combine deep expertise in Agile program management with a comprehensive understanding of government compliance, cybersecurity, and AI governance, positioning us as trusted partners for leaders navigating this transformation.

KEY THEMES IN MANAGING AI PROGRAMS

THE TRANSFORMATIONAL MOMENT

Implementing AI is not merely adopting a new tool. We are living in a transformational moment in history where AI will fundamentally change how we live, work, and think. Investment has grown exponentially in recent years, with even commercial providers like OpenAI and Anthropic offering low-cost models to

government customers. For agencies, this means opportunities to leverage cutting-edge technology—but also a need for careful governance to ensure investments translate into mission outcomes rather than wasted pilots. To harness AI's full potential, agencies must combine bold innovation with disciplined governance that drives tangible mission impact

LEADERSHIP AND AGILITY IN A VUCA WORLD

The rate of change is accelerating, and leaders must operate in an environment defined by vulnerability, uncertainty, complexity, and ambiguity (VUCA). In this environment, agility cannot be sustained without executive support. Transformation is never complete, and visible leadership commitment is required to show continual progress. Effective leaders adopt mindsets that enable agility by prioritizing success over being right, distributing responsibilities and rewards, accepting uncertainty as a constant, focusing by finishing one job at a

time, understanding the cost of delay in decisions, and recognizing that systems are shaped by the interactions of people, processes, and technology. For government executives, this means actively sponsoring AI initiatives, creating space for experimentation, and ensuring governance structures evolve in step with technological change. Unlike the pre-AI leaders manage people and processes, AI-era leaders must orchestrate people and AI systems to deliver mission outcomes, set ethical guardrails, and model adoption.

OUTCOME FIRST THINKING

Effective AI adoption requires shifting focus from producing outputs to delivering measurable mission outcomes. For agencies, this means linking enterprise-level ambitions to specific use cases that solve pressing mission challenges. Outcomes should begin with the end user or mission executor, and the value chain should be reverse engineered from that perspective. Clear, consistent, and technology-agnostic definitions

of success must come first, followed by decisions on delivery mechanisms and user experience. Outcomes should always be measured in tangible terms—dollars saved, reduced cycle times, fewer compliance defects, increased likelihood of mission success, or higher percentages of AI use cases moving into production. Strong governance ensures these outcomes are realized, not lost in a sea of activity.

AI Transformation for Leaders

Explore six essential themes guiding government leaders in the age of AI.

1

THE TRANSFORMATIONAL MOMENT

Balance Opportunities With 3 Gs

AI is reshaping life and work — agencies must balance opportunity with the **3 Gs: Guardrails, Governance, Growth**.

4

GOVERNANCE OF AI

Address Ethics and Accountability

Compliance is baseline; true governance addresses ethics, security, and accountability, enhancing trust in AI implementations.

2

LEADERSHIP IN A VUCA WORLD

Foster Agility With Support

In uncertainty, agility only thrives with visible executive sponsorship and adaptive mindsets among leaders and teams.

5

FUTURE OPERATING MODEL

Align Teams to Mission Outcomes

From silos to value streams: create modular, accountable teams aligned to mission outcomes for greater efficiency and collaboration.

3

OUTCOME FIRST THINKING

Focus On Measurable Mission Outcomes

Shift from outputs to measurable mission outcomes — dollars saved, time reduced, lives improved, ensuring effectiveness and accountability.

6

ACCELERATION IMPERATIVE

Dual Operating Systems for Stability + Agility

SAFe provides the mechanism to balance stability with agility to drive AI-enabled change.

The Scaled Agile Framework (SAFe) is a structured method for managing complex programs that require both agility and control. In a government context, it provides a repeatable model for aligning program objectives, compliance, and iterative delivery across multiple teams. Throughout this paper, we use SAFe as a foundation for scaling AI programs responsibly and efficiently.

GOVERNANCE OF AI IMPLEMENTATION

Addressing compliance requirements (e.g., NIST, FedRAMP, RMF) throughout the program lifecycle is necessary but insufficient—compliance represents only the bare minimum. Governance must extend much further to establish guardrails that address ethical concerns such as bias, transparency, and accountability; security risks like adversarial manipulation or data leakage; and broader societal implications. SAFe practices can help manage these

risks by embedding governance checkpoints into release trains, using PI planning to evaluate ethical and security tradeoffs, incorporating bias detection and explainability reviews into System Demos, and ensuring cross-functional alignment across Dev, Ops, and Security. For leaders, this means being able to demonstrate both compliance and proactive stewardship of AI risks.

FUTURE STATE OF THE OPERATIONAL MODEL

Today's government program structures are largely siloed, ad hoc, and reliant on complex matrix organizations that dilute accountability. We are in another wave of transformation where outputs are 10x greater, creating both opportunity and existential threat for traditional operating models. The future state, enabled by AI, looks very different: instead of function-based silos, continuous value streams drive outcomes across departmental boundaries; rather than chaotic rhythms, simple and predictable cadences unify teams and stabilize delivery; in place of rigid

matrix arrangements, modular and self-contained units can be rapidly reconfigured to meet mission demands; and instead of fragmented objectives with little accountability, empowered teams take ownership of mission outcomes, creating deeper engagement and accountability across the enterprise. Expanding on the idea of a "system of systems," cascading outcomes vertically across the value stream ensures alignment from strategy to execution. For executives, the message is clear: modernizing operating models is not optional, and SAFe provides the roadmap.

THE ACCELERATION IMPERATIVE

Organizations must evolve their "second operating system" faster to keep pace with AI-driven change. In the sense of John Kotter's work, this refers to building a dual operating system: one that preserves the stability of the hierarchy while adding a parallel, network-like system that fosters agility, innovation, and rapid change. For government programs, this means layering an adaptive, mission-focused structure alongside existing bureaucratic systems to enable AI-driven

transformation without sacrificing compliance or control. SAFe implementation provides the practical mechanisms to activate this second operating system: Agile Release Trains, value streams, and PI planning create the parallel network that runs alongside traditional hierarchies. By embedding these practices, government organizations can balance stability with agility, ensuring the dual operating system is not only conceptual but operational in driving AI-enabled change.

BUSINESS IMPACT OF AI IN GOVERNMENT

AI is not confined to technical programs—it is becoming a business enabler across every layer of government. For mission leaders, AI accelerates intelligence analysis, enhances fraud detection, and increases the speed and accuracy of case adjudication. For business leaders, the same technologies can modernize logistics and administration: predictive maintenance reduces downtime of vehicles and equipment, AI-enabled HR systems forecast workforce attrition and strengthen recruiting pipelines, and financial management tools identify anomalies in invoices to prevent fraud and waste. Even citizen-facing services benefit, with AI-driven chatbots improving response times and translation engines expanding access for diverse populations.

What ties these examples together is the ability of AI to reduce cycle times, cut costs, and improve service outcomes. These benefits matter directly to executives who are responsible for delivering results with finite budgets and rising expectations. By aligning AI investments with clear business outcomes—whether measured in dollars saved, backlog reduced, or citizen satisfaction improved—leaders can ensure that AI adoption supports both mission excellence and operational efficiency.

SAFe acts as the bridge between AI innovation and bureaucratic structure—transforming agency processes that are often rigid, compliance-driven, and slow to adapt. By establishing repeatable rhythms and governance checkpoints, SAFe enables agencies to harness AI's potential without losing the discipline of oversight and accountability. In this way, innovation and bureaucracy are not in conflict but integrated through structured agility.

SAFe: The Bridge Between Innovation and Bureaucracy

- Aligns AI innovation with federal compliance standards to ensure responsible modernization.
- Transforms bureaucratic processes into iterative value delivery that accelerates outcomes.
- Integrates executive oversight within Agile workflows to strengthen accountability.
- Establishes clear cadence, roles, and responsibilities to enable rapid, controlled change management.
- Promotes transparency in goals, plans, and outcomes to enhance stakeholder alignment and trust.

OUR PERSPECTIVE

Graham's experience in our USCIS Security program provides a strong example of SAFe in action within a government environment working with evolving conditions. We serve as the first team within USCIS Information Security Division (ISD) implementing SAFe across five specialized teams—Security Control Assessment, Penetration Testing, Security

Development, Secured Communication, and Classified Support. These teams operate with unique workflows but are unified at the Branch level through a shared Agile Release Train (ART) cadence, overseen by the Branch Chief as Product Manager and a SAFe-certified Program Manager serving as Release Train Engineer.

Through SAFe practices, GCACS integrates systems thinking, iterative development, backlog management, DevSecOps, and PI planning:

- **Systems Thinking:** Security assessment, penetration testing, and SecDev automation are managed as interdependent components of a unified ecosystem. For example, fragmented data previously delayed compliance tracking; by integrating SCA checklists with a compliance dashboard, we provided near real-time visibility and automated gap identification for decision-makers.
- **Iterative Development:** Operating on two-week iteration cycles, the SecDev team continuously delivers enhancements through a secure CI/CD pipeline with feature toggles and automated compliance checks, reducing operational disruption and strengthening security posture.
- **Backlog Management:** Backlogs are tailored to each team's tools but coordinated at the ART level through Microsoft Teams Planner, ensuring alignment and prioritization of high-value work.
- **DevSecOps Integration:** Security is embedded from design through deployment, with automated vulnerability scanning, compliance checks, infrastructure-as-code, and real-time operational monitoring.
- **PI Planning:** Quarterly PI Planning events bring together the ART, leadership, and stakeholders to review accomplishments, align on priorities, and set commitments for the next increment.

The impact has been measurable: USCIS improved compliance responsiveness, accelerated automation of RMF processes, and enhanced cross-team collaboration in a highly sensitive mission environment. This past performance shows how SAFe can unify specialized teams, strengthen governance, and deliver secure mission outcomes for federal customers.

We bring direct experience implementing SAFe governance in mission-critical environments across DHS, DOE, FBI, and other customers. Our teams have enabled agencies to move AI pilots into production while meeting the highest standards of compliance and accountability. These experiences position us as a trusted guide for government leaders seeking to scale AI responsibly.

This paper is written for government agencies and program leaders seeking to integrate AI into mission-critical operations. Our purpose is to show how our approach to program and portfolio management ensures government customers can successfully and securely manage AI initiatives. We combine deep expertise in Agile program management with a comprehensive understanding of government compliance, cybersecurity, and AI governance, enabling us to guide agencies toward AI adoption that is both innovative and accountable.

BEST PRACTICES AND SAFe-BASED STRATEGIES

Becoming truly AI-native means weaving AI into the daily ways of working, not treating it as an add-on or experiment. For government leaders, this starts with setting clear intentions: use AI to solve pressing mission problems and create measurable value. Agencies must guard against three common pitfalls: the value gap, where AI capabilities do not align with mission needs; the AI graveyard, where proofs of concept never reach production; and the hype trap, where trends are followed without solving real problems. Success depends on building three catalysts—sound strategy, focused investments, and skilled people—supported by strong governance, ethical guardrails, curated data, and proven technologies. The journey also involves reaching higher levels of cognitive resolution, or the ability to see problems and solutions with greater clarity. At every stage, human expertise is essential. AI tools deliver their greatest value when paired with human judgment and leadership.

The best measure of SAFe success is whether real mission problems are solved. To achieve this, agencies should start by identifying the most urgent use case, then align skills, funding, and governance around it.

Metrics such as the percentage of pilots that scale into production, cycle time reduction, or improvements in mission outcomes provide concrete indicators of progress. Tailoring SAFe practices to workforce context is also critical—this means ensuring the right people with the right skills are in place at the right time, and equipping teams through training and support. When people, process, and technology are aligned, outcomes scale more effectively and responsibly. As a certified Scaled Agile Framework (SAFe®) partner, Graham Technologies brings recognized expertise in implementing agile program governance across complex, regulated environments.

Scaling AI responsibly requires deliberate practices. These include embedding governance checkpoints into Agile Release Trains and program increments, conducting risk and compliance reviews during PI planning and demos, aligning development, operations, and security for continuous monitoring, and certifying staff in AI-native practices. By pairing these disciplines with a strong focus on people and mission outcomes, government agencies can move beyond pilots and deliver trusted, accountable, and mission-aligned AI at scale.

CHALLENGES IN MANAGING AI-POWERED PROGRAMS

Managing AI in government programs requires far greater governance than traditional IT systems. Compliance with standards like NIST, FedRAMP, and RMF is essential but represents only the baseline. Stronger guardrails are needed to ensure AI systems are transparent, ethical, secure, and mission-aligned. The complexity of AI systems and model behaviors that evolve at exponential speed requires continuous oversight. Outputs can scale rapidly, demanding carefully defined mission problems, constraints, and governance guardrails to ensure meaningful outcomes.

Verification, validation, and explainability challenges unique to AI necessitate structured review cycles, governance checkpoints, and a clear role for human-in-the-loop oversight to ensure accountability and mission alignment. Integrating AI into existing mission systems requires intentional change management and alignment of governance structures. Compliance must be paired with proactive governance that addresses ethical, legal, and reputational risks from the outset.

TRANSFORMATION IN PRACTICE: BEFORE AND AFTER SAFe IMPLEMENTATION

Before SAFe, a government agency piloted several AI proofs of concept to improve mission decision-making. While technically promising, most efforts stalled. Projects lacked clear outcome definitions, governance guardrails, and alignment with mission priorities. Teams operated in silos, procurement cycles were slow, and executive sponsors struggled to see measurable value. As a result, many AI initiatives remained stuck as prototypes—adding cost but little operational impact.

After SAFe implementation, the agency restructured AI efforts around value streams and program increments. Outcomes were defined upfront using a job-to-be-done lens, with clear mission metrics. Governance checkpoints were embedded into release trains to

manage bias, security, and compliance. Agile Release Trains synchronized work across development, operations, and security, while leaders provided visible sponsorship and accountability. Within two program increments, AI-enabled solutions moved from prototype to production, reducing decision cycle times by 30% and lowering compliance rework by 25%. Most importantly, leadership gained confidence that AI was delivering measurable mission value.

This before-and-after contrast highlights how SAFe implementation transforms AI adoption from isolated experiments into mission-focused, governed, and scalable outcomes.

CONCLUSION

Government programs adopting AI must balance mission urgency with responsible governance. Compliance is only the starting point—effective AI implementation requires broader guardrails that address ethical, security, and operational concerns. By applying SAFe practices and embedding these

governance principles into release trains, PI planning, and continuous delivery, agencies can iteratively manage risks while accelerating mission outcomes. Our approach ensures AI delivers measurable mission value while meeting the highest standards of accountability, transparency, and trust.

CALL TO ACTION

The integration of AI into government programs is not a future challenge—it is a present imperative. Agencies that succeed will be those that adopt strong governance, align AI to mission outcomes, and use SAFe as the proven framework to scale responsibly. We invite government leaders to engage with us to discuss how SAFe implementation can accelerate the move from prototype to production for AI solutions, embed governance guardrails

that ensure transparency, ethics, and security, align executive leadership, program teams, and technology to mission outcomes, and deliver measurable improvements in agility, compliance, and mission performance.

Let's explore together how SAFe can transform your AI initiatives into governed, outcome-driven success.

Policy, Environmental Context, and AI Governance

The U.S. policy landscape around AI is evolving rapidly, with shifting priorities across administrations. Recent federal directives emphasize accelerating innovation, strengthening AI infrastructure, and redefining risk management standards. These changes highlight the need for agencies to maintain adaptable governance frameworks capable of responding to both regulatory and technological shifts. Accompanying executive orders emphasize reducing regulatory barriers, promoting an American AI technology stack, and enforcing principles to eliminate perceived ideological bias in AI systems. The Department of Commerce rebranded the AI Safety Institute as the Center for AI Standards and Innovation (CAISI), with a stronger focus on national security threats and less on broader social risks.

For government customers, this context underscores two key impacts: compliance and governance expectations may evolve quickly as federal standards are reshaped, and emphasis will increasingly be on AI's role in mission impact, national competitiveness, and security outcomes rather than societal considerations. Agencies and contractors should anticipate potential shifts in procurement language and oversight aligned with this policy direction.

At the same time, the NIST AI Risk Management Framework (AI RMF 1.0) remains the primary U.S. standard for governing AI implementation. Though voluntary, it provides a structured approach for organizations to identify, assess, manage, and monitor AI risks across the lifecycle. The framework is built on four core functions: Govern (establish policies, roles, and accountability for AI use), Map (contextualize and frame AI risks for stakeholders and missions), Measure (assess, benchmark, and monitor AI performance, risks, and impacts), and Manage (prioritize and mitigate risks through continuous improvement). By embedding these functions, agencies and contractors can ensure AI adoption is responsible, trustworthy, and aligned with federal expectations. Implementing AI RMF demonstrates compliance readiness, strengthens procurement credibility, and creates a foundation for trustworthy AI outcomes.



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