



The Technology Leader's Guide to AI in Federal Proposal Development

Enterprise IT and security leaders' guide to
choosing the right AI tool for proposal success



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About

Across the federal contracting landscape, enterprise IT leaders such as Chief Information Officers (CIOs), Chief Technology Officers (CTOs), and Chief Information Security Officers (CISOs) are seeing an increase in responsibility to support and manage AI adoption. Business development teams want faster, smarter ways to produce compliant, compelling proposals. But behind this urgency lies a minefield of security, integration, and compliance risks—especially when unvetted AI tools are used without IT involvement.

pWin.ai offers a purpose-built, enterprise-grade solution: secure, aligned with federal contracting requirements, and designed for ease of adoption. Unlike generic platforms that attempt to handle capture, pipeline management, and proposal development all at once, pWin.ai is intentionally focused on one mission-critical objective: producing faster, higher-quality RFP and RFI responses. This specialization enables pWin.ai to go deeper on proposal functionality, optimizing workflows and outputs to meet the unique demands of federal business development teams.

Key Questions this Guide Aims to Answer:

- 1 **Where are the real AI risks in federal contracting?** How shadow AI can introduce vulnerabilities—and why IT leaders should get involved early to control compliance and data exposure.
- 2 **What are the critical requirements of a vendor?** The main pre-commitment considerations when it comes to security, compliance, and AI governance.
- 3 **Why choose a purpose-built solution for proposals?** What makes pWin.ai different from generic AI tools that try to cover capture, pipeline, and proposals all at once.
- 4 **How to test adoption with minimal risk?** An overview of pWin.ai's RFP QuickPilot and how it helps validate functionality, security, and fit without a long-term contract.

AI in Federal Business Development

The momentum behind AI adoption and use in public sector contracting is accelerating, driven by the need for more efficient, strategic, and compliant responses to complex government solicitations.

- **68% of proposal** teams now use generative AI in the RFP process, more than double what it was last year, according to industry research.
- Business leaders expect AI to improve productivity by **23%** in the next 18 months, according to Gartner.

Effective proposal generation—particularly in high-stakes, compliance-driven environments—requires

more than just fast content. It demands strategic alignment, evaluative rigor, and traceable authorship.

This is where Shipley methodologies, long recognized as the gold standard in government proposal writing, become crucial. pWin.ai, which has been built from the ground up with Shipley, uses integrated Shipley best practices to ensure that RFP response content aligns with customer pain points, win themes, and evaluation criteria—not just word count or format. When AI is guided by such proven frameworks, it becomes a force multiplier for both efficiency and strategic quality, accelerating timelines without sacrificing compliance, accuracy, or the persuasive impact needed to win.

Why Growth Teams Need AI Proposal Software

Over 90% of organizations view proposal professionals as critical drivers of business growth. Yet these teams face overwhelming demands—pressured by shortening turnaround times, tightening compliance requirements, and increasingly complex and competitive federal solicitations. At the same time, teams also face growing internal expectations to do more with fewer resources, all while building more accurate, compliant, and compelling content.

The main challenges AI can help with include:

Increasing complexity of RFPs

RFP requirements are normally spread across sections C (Statement of Work), M (Evaluation Criteria), and L (Instructions). These documents often exceed hundreds of pages, requiring careful parsing and mapping of requirements to ensure a compliant and compelling response. AI built and trained on proposal domain-specific expertise such as the Shipley methodology, strengthens this process by aligning proposal content with each section, reinforcing win themes, and ensuring evaluators can quickly see compliance and value.

Timelines are Tightening

Many solicitations allow only a few weeks—or even days—to respond. This compression forces already stretched teams into continuous high-stakes tradeoffs

about which opportunities to chase, which to drop, and which to rush while they try to coordinate with SMEs, structure content, ensure compliance, and tell a clear story. AI can alleviate time pressure if it's tightly integrated into proposal workflows from the start.

Manual Processes Introduce Risk

This issue is especially prevalent in compliance-heavy GovCon environments. Copy-pasting from previous proposals, reformatting compliance matrices, and digging for past performance examples are not only time-consuming but also error-prone. Every missed or undercooked submission is lost revenue, reduced scale, and a hit to competitiveness. By contrast, tools like pWin.ai automate a large part of document shredding, content mapping, and solution alignment—allowing teams to focus on strategy rather than logistics.

“As a defense contractor, our chief concerns were security and protecting proprietary information. pWin.ai addresses those concerns and meets our requirements.”



Randy Walker
Chief Engineer, SimVentions

Why IT Leaders Must Get Involved Early

A critical concern for CISOs and other security and tech leaders is the proliferation of unauthorized AI usage within their organizations. According to a July 2025 ManageEngine report, **93% of employees admit to inputting information into AI tools without company approval**, while 60% of employees say they are using unapproved AI tools more than they were a year ago.

Unmanaged AI usage—often introduced without formal IT oversight—can quietly erode enterprise security posture. Employees may interact with unauthorized tools out of convenience, but these interactions often bypass established access controls, expose sensitive information, and create vulnerabilities that are difficult to detect or contain. Without clear visibility into which tools are being used, what data is being shared, and how content is being generated, organizations risk

undermining the very compliance frameworks that govern their operations.

The risks are materializing, as nearly 80% of IT leaders report their organization has experienced negative outcomes from sending corporate data to general-purpose, publicly available AI tools, according to data management firm Komprise.

Some proposal writing applications built on top of OpenAI’s ChatGPT (or other large language models), called “ChatGPT wrappers”, can be more secure, but still require users to spend hours manually shredding the RFP, developing prompts for each RFP section, and combining generated responses into a cohesive draft. This process fails to realise the full potential teams can see when adopting AI in the response process.

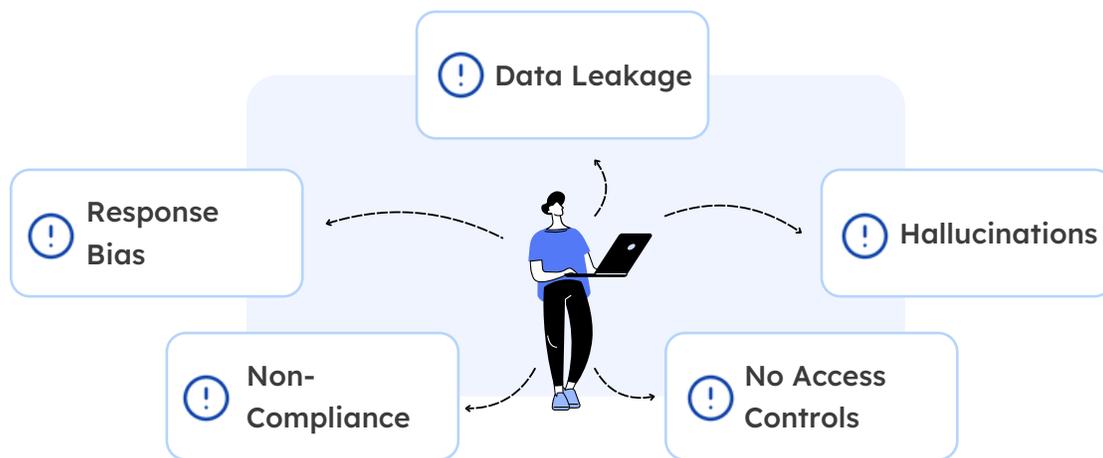


Figure 1. The pitfalls of using “shadow AI”—unauthorized AI tools used for work.

Evaluation Criteria for AI RFP Response Tools

When evaluating AI RFP response tools, IT leaders should prioritize vendors that demonstrate:

- **Security & Compliance Architecture:** Look for CMMC-aligned solutions with built-in encryption and user access controls.
- **Data Handling & Privacy:** Vendors should provide strong data protection with support for CUI, data residency controls, and no training or reuse of customer data.
- **Transparency by Design:** Ensure the solution offers documentation of how AI outputs are generated, reviewed, and verified, including explainability and traceability.
- **Domain Expertise:** Choose a vendor that has developed a tool with in-built proposal writing expertise, that goes beyond being just a ChatGPT wrapper and is capable of creating full drafts without users having to constantly fine-tune and engineer prompts.

pWin.ai's Strategic Advantage for IT Leaders



Security-First Architecture

- **Data Security and Encryption:** pwin.ai ensures customer data isolation and employs end-to-end encryption using AES-256 standards. Additionally, customers can manage their own encryption keys, for greater control over sensitive information.
- **Secure Software Development Lifecycle (SSDLC):** Security is built into every phase of the software development lifecycle, including proactive risk assessment through threat modeling, security code reviews, and use of tools such as Microsoft Defender for DevOps, for continuous vulnerability scanning.
- **Continuous Compliance and Governance:** pWin.ai accredits its offerings to compliance standards, using Microsoft Defender to automate monitoring and keep alignment with essential standards such as FedRAMP, NIST 800-171, and CMMC.
- **Threat Protection and Incident Response:** pWin.ai's AI-powered threat detection leverages machine learning to identify potential threats, while ransomware protection measures using immutable storage snapshots allow for the reversion to a previous state in case of an attack. Incident response playbooks streamline the approach to threat containment, enhancing pWin.ai's overall security posture.



For a deeper understanding of pWin.ai's security standards, credentials and Azure service used, sign up for our Security Masterclass [here](#).



Ease of Adoption and ROI

- **Workflow-Aligned from Day One:** Designed with Shipley Associates, pWin.ai aligns with federal proposal workflows from day one—no need to change your process to adopt it.
- **Team Security Expertise:** pWin.ai's engineering team has decades of collective experience building secure cloud applications for government contractors and government agencies, including the Department of Defense (DoD).
- **Proven Return on Investment:** pWin.ai customers report up to 80% faster draft creation, 20% higher win rates, and significant reductions in knowledge sourcing. Read our case studies on how [AIS](#) and [Astrion](#) supercharged their proposal using pWin.ai for more details.
- **Full Proposals, No Prompt Engineering:** Unlike any other AI proposal tool, pWin.ai uses a response engine (granted a provisional patent) that can generate structured, domain specific and iterative prompts behind the scenes to generate a full Shipley-quality proposal draft without requiring users to write technical prompts themselves.

pWin.ai addressed our concerns and met our security requirements for confidential data.. Our writers are Shipley trained, so a tool that utilizes Shipley best practices was invaluable in our adoption journey.



Director of Proposals
U.S. Defence Contractor



Responsible AI by Design

- **No Authorship Policy:** pWin.ai is a tool for assistance, not a substitute for human expertise. It acts as a proposal writing co-pilot, helping to structure, organize, and optimize proposal responses while leaving true authorship, control, and final ownership in human hands.
- **Assistance in Decision Making:** pWin.ai's Flight Plan accentuates your organization's own core competencies and win themes, but keeps humans at the helm of the process.
- **Traceability and Transparency:** Features like Citation and Hallucination reports enable proposal teams to verify and trace content to its source, enhancing accuracy in every proposal.
- **Content Validation:** All AI-generated content is exclusively sourced from your organization's own internal library of knowledge, including past performances, capabilities, and company info, maintaining alignment with historical responses. This approach also reduces the risk of hallucinations based on information pulled from the broader web.



For a deeper look at pWin.ai's Responsible AI principles, and how proposal teams can utilize AI without compromising on human authorship, click [here](#).

pWin.ai vs. Other Tools: Comparison Matrix

Capability	pWin.ai	Typical AI Proposal Tools
NIST/CMMC Alignment	✓ CMMC L2, NIST 800-171 compliant	⚠ Limited or unknown
Data Isolation & No AI Training	✓ Zero data training, isolated tenancy	⚠ Often trained on user data
Enterprise IAM Integration	✓ SSO, MFA, federated identity	⚠ Minimal user control
Traceability & Compliance Tools	✓ Hallucination and citation reports	✗ No content traceability
Proposal-Writing Specialization	✓ Built with Shipley best practices	✗ General-purpose LLMs
Full Response Generation	✓ No prompting required	✗ Need for prompt engineering

Checklist for Tech and Security Leaders

Requirement	Why It Matters	How pWin.ai Delivers
Data Sovereignty	Prevents unauthorized transfer or use of sensitive content	Full data isolation, no LLM training on customer data
Data Isolation & No AI Training	Restricts access to confidential proposal content	RBAC, MFA, federated ID management
Enterprise IAM Integration	Supports compliance, legal defensibility	Citation & compliance reports per section
Traceability & Compliance Tools	Controls for hallucinations and factual accuracy	Built-in validation and human-in-the-loop workflows
Proposal-Writing Specialization	Enables secure handling of CUI, CTI	Azure Government deployment, CMMC/NIST aligned

pWin.ai is Available in Two SaaS Forms:

pWin.ai Commercial	pWin.ai Gov
Operates within Azure Commercial & M365	Operates within Azure Government & GCC High
Follows enterprise security best practices	NIST 800-171 compliant
CMMC Level 1 Compliant Version	CMMC Level 2 Compliant Version
Allows Federal Contract Information (FCI)	Allows Controlled Unclassified Information (CUI) and Controlled Technical Information (CTI)

pWin.ai is also available to deploy in your own Azure cloud environment.



Conclusion

For tech and security leaders at federal contractors evaluating AI RFP response tools, the statistics reveal significant opportunities. However, the high-threat environment facing federal contractors, demands a comprehensive security-first approach to vendor evaluation.

Priority should be given to vendors that demonstrate mature security architectures and compliance with emerging federal and state AI regulations.

The prevalence of shadow AI usage underscores the importance of selecting tools that can be properly governed and monitored within existing security frameworks.

pWin.ai enables federal proposal teams to harness the power of generative AI—with the guardrails CIOs, CTOs, and CISOs expect. From its security-first design to its Shipley-informed writing engine, it's built for the real-world complexity of government contracting.

Try pWin.ai Risk-free with Our 90-Day RFP QuickPilot

Want your team to experience the full power of pWin.ai on your own data? Try pWin.ai risk-free with our 90-Day RFP QuickPilot. Access our complete suite of products, including RFP, RFI, Chat, Knowledge Repository, and Reports.

Register for our Live Demo to learn more by clicking the link to the side or by scanning the QR code.



[Register for a Live Demo](#)

QuickPilot Benefits

On Your Own Terms	Evaluate pWin.ai with your own data and against real RFPs.
Full Platform Access	Use every pWin.ai module: RFP, RFI, Chat, Knowledge Repository, citation reports, and more.
Team-Wide Seats Included	Proposal staff, writers, SMEs, reviewers, and capture managers can all collaborate in the same secure workspace.
White-Glove Onboarding	Work directly with our Customer Success team to hit your proposal goals.
Secure Deployment	Your content stays private; no data is ever used to train public models.

pWin.ai empowers businesses of all sectors to win proposals faster and more easily. pWin.ai is built from the ground up on Shipley best practices to produce content that gives you a competitive edge.

See pWin.ai in action

Contact us to learn more about pWin.ai or request a custom demo:

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