

Maximizing the impact of AI in GovCon operations:

Access AI's potential while avoiding the pitfalls



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A general guide to AI in GovCon operations

Artificial intelligence is making waves in every industry and sector

It's apparent by now that artificial intelligence (AI) is a disruptive technology, sure to completely transform how the world works. Most people predict the impact will be similar to when personal computers hit every desk in the office, giving everyone the ability to do more, faster. The advent of the Internet re-shaped how information is shared and accessed. Today, AI technologies are revolutionizing every aspect of life – especially in business.

How AI is Reshaping Entire Industries :

Healthcare: medical practices use AI for diagnoses and predictive analytics.

Finance: banks and analysts benefit from AI in algorithmic trading, fraud detection, and personalized financial advice.

Manufacturing: factories improve efficiency through AI-driven automation and predictive maintenance.

Entertainment: streaming services embrace AI for content recommendation and enhanced virtual experiences, while gaming employs AI-powered interactive experiences to improve the game experience.

Telecommunications: cell providers offer AI customer support and network optimization.



Government contractors (GovCons) are starting to explore what AI can do to make their businesses more efficient.

AI offers intriguing opportunities to accelerate business processes, simplify complex compliance management, and help GovCons capitalize on new opportunities. But it's also new enough that questions around privacy, security, and compliance have significant merit.

Level-up on a level playing field

Government contracting is renowned for its red tape and regulatory complexity. It's especially challenging for small- to medium-sized businesses to gain any sort of foothold, let alone a competitive advantage. Layers of accounting regulations, process documentation, and multiple meticulous audits create complexity that only companies with deeper pockets have historically been able to adequately navigate.

However, with the advancements in natural language processing (NLP) technologies and the introduction of large language models (LLMs) like ChatGPT that can be run in a browser window, AI is now accessible to businesses of all sizes.

These technologies can understand, interpret, and generate human language in a way that's meaningful and contextually relevant, leveling a previously uneven playing field by:

- Simplifying the intricate contracting process
- Automating routine tasks
- Validating compliance with regulations and procedures in real-time
- Augmenting decision-making
- Creating a more agile and responsive operational landscape

Still, wading into the AI waters demands caution. GovCon companies must understand the pros and cons of AI and the technology's impacts on key operational areas.

The Department of Defense's Office of Small Business Programs says it typically requires at least 18 months of planning before a company wins its first government contract.¹

¹ Guide to Marketing to DOD, Department of Defense Office of Small Business Programs, [Business.defense.gov](https://business.defense.gov).



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Operational Area	Pros	Cons
Winning bids	AI revolutionizes the bidding process by interpreting complex contracts, streamlining functions, analyzing large datasets, and predicting optimal pricing strategies.	GovCons must incorporate human decision-making into the results of AI algorithms and ensure the bidding environment remains fair and transparent.
Executing/managing project operations	Integrating AI into project management improves efficiency and leads to timely decision-making. With ability to automate clauses, project codes, and task creation.	Companies must balance between automation and human oversight to maintain accountability and be prepared for unforeseen challenges.
Compliance with government regulations and guidelines	AI aids in compliance by automating regulatory checks and ensuring guideline and process adherence.	AI must be continuously monitored to ensure it keeps up with evolving government regulations.
Data security	AI can enhance IT security by providing analysis and threat identification, helping identify attacks before they occur.	AI systems can require sensitive data to operate, and AI cybersecurity solutions might miss threats. GovCons must ensure data is secure before leveraging AI to process and analyze sensitive data. Additionally, AI can complicate the audit trail for data and processes - compliance with government regulations requires data to be handled carefully.



AI is a driving force behind innovation, efficiency, and transformative change in diverse sectors, with continued growth and potential on the horizon. Eventually, much like the personal computer and the internet, most companies will have no choice but to adopt AI. GovCon companies stand to gain much in this technological wave – provided they get it right.

AI + jobs to be done is a winning formula

GovCons implementing the Jobs to Be Done (JTBD) framework can leverage AI to overcome some of the challenges they face. As GovCons study their customers' wants, AI can assist in identifying pain points, creating solutions, and analyzing feedback to better align proposals and services delivery with the demands of their customer – and the bottom line.

Current generative AI technologies have the potential to automate 60 to 70% of the work activities employees spend time on today.²

The federal government committed approximately \$694 billion in contracts in Fiscal Year 2022, about \$3.6 billion more than FY 2021.³

² The economic potential of generative AI. The next productivity frontier." McKinsey Digital. Mckinsey.com. June 14, 2023.

³ A Snapshot of Government-Wide Contracting for FY 2022." U.S. Government Accountability Office. GAO.gov.



Winning new business/expanding

Challenge for GovCons

Time is money. GovCons can waste both if they're pursuing potentially unprofitable or hard-to-win projects. To avoid that, teams must sift through huge amounts of information to identify contracting opportunities, and search relevant documents like past requests for proposals (RFPs), and case studies.

But that requires decision makers to visualize data to uncover patterns and opportunities, then put together bids – often by scratch.

How AI can help

AI-driven analytics can sift through vast datasets to identify lucrative opportunities, while machine learning algorithms can predict the probability of success for different projects, optimizing resource allocation.

After identifying a project, AI can accelerate and simplify RFP creation by automating the search through relevant documents.

Combining the search with NLP algorithms that understand and generate human-like responses, AI automation can speed up the sales team's efforts and let them generate RFPs faster, giving companies a competitive edge.

Automation lets companies use AI-driven templates to minimize the manual effort that goes into each RFP and ensure consistency and accuracy across proposals.

Automated data analysis and automation make it easier for decision-makers to visualize complex scenarios, identify patterns and insights, view side-by-side comparisons, and use data-driven insights to craft bids with a high chance of success.

Project management and execution

Challenge for GovCons

Traditionally, project management has been a manual process. Project managers often relied on document markups for contract negotiations, worked in spreadsheets for tracking resources and progress, and email collaboration as the main means of communication.



They have to worry about supply chain issues, labor shortages, and how cost overruns can affect project management and profitability. Manual processes by nature are prone to error and require time and manpower that should be allocated elsewhere.

Even routine, repetitive tasks like payment processing require manual input and a misplaced decimal point or project code can throw off a project's entire budget – costing both dollars and valuable time to rectify.

How AI can help

Automating with AI removes the manual input and improves efficiency by handling routine tasks such as payment processing. NLP and character recognition improve accuracy and can identify anomalies and flag potential errors or fraud.

Other repetitive operations like creating alerts for milestones or missing data can be automated with robotic process automation (RPA), improving accuracy through data validation to detect and alert about input errors.

RPA can assist in predicting supply chain or labor shortage issues by providing visibility of the supply chain, a real-time flow of information, and rapid response, while automatically generating notifications for delays or shipping and handling activities.

Successful project management relies on proper resource allocation, and predictive AI analytics be used to anticipate labor shortages or supply chain issues. AI helps optimize team composition by analyzing skills, certifications, and historical performance.

AI can save time for the Human Resources (HR) department by automating manual tasks in the recruiting process and automating the new hire onboarding process. AI can assist with learning and development by analyzing employees' current qualifications and creating personalized training programs. Note, however, that AI doesn't have the same discernment skills as a person and shouldn't be used on its own to screen for job candidates, for example. Companies that use AI for recruiting should have a person overseeing the results to make sure the AI's suggestions aren't biased. ⁴

Cost accounting and control improves by using AI-driven systems to centralize data and enable real-time accounting and on-demand reporting. Predictive analytics can identify cost trends and potential overruns, offer real-time or near real-time accounting, and provide accurate, on-demand reporting to decision-makers.

⁴Power, Rhett. "Where AI Can and Can't Help in Talent Management." *Forbes*. *Forbes.com*. August 13, 2023.



Compliance and auditing

Challenge for GovCons

GovCons must comply with stringent government regulations during the life of a contract and are subject to audits. The language in the Federal Acquisition Regulation (FAR) is unique to the government, making it both challenging to decipher and to ensure all employees are up-to-date with training and understanding the nuances of the rules.

How AI can help

AI models can be trained on the language of the FAR and its clauses, and ensure the correct clauses are included in an RFP. However, it's up to the company to ensure that AI doesn't misunderstand or overlook a clause.

Automated alerts can notify teams of potential issues like mismatched data or unallowable costs before audits.

GovCons can maintain compliance with complex government regulations by using AI to analyze and apply rules, reducing the risk of non-compliance and helping companies stay on top of requirements.

Continuous AI monitoring can also detect deviations from established procedures while alerting for issues and helping customers identify issues that could be flagged in an audit down the line.

AI-driven training modules can efficiently disseminate information and updates to all employees and can create interactive learning tools to enhance engagement and knowledge retention.

Key challenges with AI in GovCon

AI already demonstrates significant advantages to GovCons. However, companies must keep in mind that integrating AI into operations also comes with its own set of challenges.



CMMC Compliance

Ensuring compliance with the Department of Defense's (DoD) Cybersecurity Maturity Model Certification (CMMC) is a business imperative for GovCons. Not only will it be a regulatory requirement, but having a serious cybersecurity breach is an existential threat to a future in government contracting. Data privacy and security are critical, and safeguarding sensitive data is a primary concern for the government. CMMC is the standard that ensures defense contractors protect sensitive defense information by following current security protocols and practices.

GovCon companies must implement robust measures to protect data privacy and security. In addition, companies must exercise careful consideration when sharing data with Large Language Models (LLMs) or other external datasets, as this poses potential risks to confidentiality, privacy, and unauthorized access to sensitive materials. AI systems are complex and introduce multiple points of potential failure or breach, necessitating comprehensive risk management strategies.

Other Compliance and Audit Considerations

AI-based processes introduce a range of questions about audibility and accountability. GovCons need to ensure that training data is secure and that AI systems comply with regulatory requirements. More importantly, organizations must have strategies and processes in place for auditing AI solutions over the life of the systems to ensure compliance with regulatory standards and to help identify risks, biases, and errors that can lead the AI astray.

Considerations and steps for implementing AI in GovCon

One of the most important things to remember is that it's not a matter of whether a GovCon will implement AI into its processes, but when.

Government agencies themselves have begun to use AI tools in their operations to streamline operations, using AI tools to search for new vendors who've had experience working in specific sectors and with government agencies. Soon, they'll want to employ the same technology to automate their own internal operations.



Successfully implementing AI solutions requires a methodical, structured, and strategic approach to avoid missteps.

6 essential steps for implementing AI in GovCon business

- 1** Identify processes and systems that could leverage AI, to maximize operational efficiency and decision-making.
- 2** Identify/hire/train key personnel and leaders in the organization who understand the intricacies of AI implementation.
- 3** Prepare organizational data for AI integration, ensuring its cleanliness, accuracy, and relevance for optimal performance.
- 4** Determine/understand data security and privacy risk profile, implementing measures to safeguard sensitive information.
- 5** Understand and map processes and tools to compliance requirements, ensuring alignment with industry regulations.
- 6** Plan a phased implementation across Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), and other core systems for seamless integration.



Unanet: Purpose-Built AI is better

Successfully navigating today's business landscape requires using every tool at your disposal – including artificial intelligence. GovCons can no longer rely on outdated manual data collection and recreating RFPs every time they bid on a contract.

A leading provider of ERP and CRM solutions for GovCons, Unanet helps companies stay on top of technology and ahead of the competition.

Work with Unanet: What's in it for you?

- Automate analysis of projects and reports to detect errors
- Create dashboards and alerts for key project and finance milestones and issues
- Predict wins based on past project experiences
- Better capture information about the contacts and companies that drive their business
- Find and extract contact information buried in emails, enabling users to add them to their CRM in real time
- Research a potential client and automatically create a company record in your CRM database based on its findings
- Providing a compliance backstop by understanding regulatory requirements and automatically checking costs, procedures, and reports for errors
- Improve data quality by cleaning up duplicate records and missing information



Unanet's flexible, scalable, and adaptable platform is designed to meet the needs of GovCon businesses now and in the future.

Our experienced GovCon business experts can assist you in planning your AI, machine learning, and NLP deployments for maximum impact with minimal headache. Unlock productivity and new levels of profitability with best-in-class solutions and services purpose-built for project-driven organizations like yours.

Visit <https://unanet.com> to schedule a complimentary AI Preparedness Consultation or call 888-305-1510 for a free demo to see Unanet in action.



More than 3,700 project-driven organizations depend on Unanet to turn their information into actionable insights, drive better decision-making, and accelerate business growth. To learn more about Unanet's ERP and CRM solutions for government contracting firms, visit unanet.com

