SmartGov.ai
AI-Smart Federal Acquisition
Pitch Challenge: “How can emerging technologies help streamline the acquisition lifecycle?”

CoreCLM is an “emerging tech” startup focused on disrupting the Contract Lifecycle Management (CLM) space using native Artificial Intelligence/Machine Learning capabilities (Headquartered in Seattle, WA)

We believe in:

• Operationalizing & accelerating procurement processes using innovative technologies, at scale!
• Leveraging open-source technologies where feasible
• Developing AI systems with human-in-the-loop workflows
• Information governance practices by building on industry-standard security protocols
• Ethical AI by eliminating conscious & unconscious bias in all AI/ML algorithm development and use
• Domain-agnostic technology development (Government = Commercial)

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Federal Acquisitions - Capability Gaps

**PEOPLE** – Potential of low morale due to time and labor-intensive repetitive tasks

**PROCESS** - Complex and manually executed workflows

**TECHNOLOGY** - Operations rely on outdated technologies

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Federal Acquisitions - Why AI to streamline the lifecycle?

Complex processes
- Federal acquisition processes are complex by design to support the different regulations, multiple procurement categories and agency needs

Unstructured and structured data in multiple data repositories
- Large volume of data accumulated from the past and current acquisition programs
- Different data repositories representing discrete procurement functions and agencies
- Potential to have data gaps and redundancies
- Disparate data sources that might not be interconnected
- Unstructured data – emails, invoices, productivity applications, sensors, etc.

Government language is unique in its constructs and syntax
- Federal Regulation language is very different from natural language
- ‘Legalese’ and the very specific government contracting vocabulary, syntax, and other constructs call for AI models specifically trained for this purpose to deliver workflow automation with speed and efficiency, at scale!

Scalability & maintenance
- Ensuring the system is up-to-date with changing laws and regulations
- Relevant for expanding needs of the government acquisitions
Federal Acquisitions – Key Use Cases across the Lifecycle

**Pre-award** (planning, solicitations, evaluations, award)
- Automatically generate FAR based solicitations and contracts (MVP scope)
- Automatically generate non-FAR based solicitations, contracts, and associated obligation of funds
- Automatically source CPARS data to inform contractor selection
- Automated posting of RFI and Solicitation documents to SAM.gov, GSA E-buy, Tradewind, and other portals
- Access to automatically generated CARs/FPDS upon award
- Manage/track award lead times/milestones
- Receive and align funding packages to contract actions

**Post-award**
- Automatically generate contract modifications
- Track and manage contract financials (e.g., invoice pay outs against award obligations)
- Manage contract performance in accordance with contract requirements
- Access to automatically generated contractor performance data for completion of CPAR

**Close-out**
- Access to automatically generated closeout documents and checklists after contract completion
- Automatically manage closeout modifications
Insert the clause at 52.202-1, Definitions, in solicitations and contracts that exceed the simplified acquisition threshold.

Invoice must be submitted by the 30th of each calendar month.

Validate that the solution delivered has no plagiarism with existing patents.

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Pre-award – Clause applicability

Post-award – Requirement check

Close out – Checklist extraction

Insert the clause at 52.202-1, Definitions, in solicitations and contracts that exceed the simplified acquisition threshold.

Input text from different phases of the acquisition lifecycle

Outputs

✓ The clause is applicable!

✓ Submit invoice on 30th of month

✓ Checklist: No plagiarism from existing patents
Proprietary AI model evaluates Federal Acquisition Regulation (FAR) prescriptions against user inputs, determines applicability, and generates draft Solicitation/Contract with required, applicable, and optional clauses/provisions.

Sample output data shows the summary of the clauses and/or provisions included in the output as well as a comparison against the output from FAR Smart Matrix on Acquisition.gov.

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*This is an example for one specific set of requirements*
# SmartGov.ai – Value Proposition of Solution

## User Experience (UX)
Intuitive and easy to use *(think Turbo Tax on a smart phone!)*

## Process/Cycle Time
Significant and demonstrable *reduction in overall cycle time* (e.g., manually determining applicability of 471 prescriptions vs. evaluating 50 prescriptions!)

## Procurement Administrative Lead Time (PALT)
*Proprietary AI/ML solution using open-source technologies* will reduce “the time between the date on which an initial solicitation for a contract or order is issued by a Federal department or agency and the date of the award of the contract or order.”

## Common Data Protocols
Built to be interoperable with other systems in the acquisition lifecycle. *Data will seamlessly flow* between connected systems.

## Data Retention & Enablement
*No data loss.* Machine Learning capabilities make the system more effective over time.  
*No data silos.* System harmonizes disparate data for optimized reuse.

## Digital Transformation
Integrations with existing portals like SAM.gov and GSA websites will allow Procurement users to *create, save, and reuse digital profiles and artifacts* for future automated digital solicitations, market research postings etc.

## Contract Intelligence
Enable a digital platform that harnesses the power of data so it can be qualitatively and quantitatively evaluated more easily to *produce valuable insights for effective decision-making* across the acquisition lifecycle.
SmartGov.ai - Product Vision

1. Human prepares requirement package
2. AI assists by analyzing data from historical contracts and market research
3. Human completes questionnaire
4. AI posts and manages through various government portals
5. Human receives & evaluates proposals, AI provides data capabilities
6. AI/Human generates a contract
7. Human awards contract
8. AI/Human verifies goods/services received before invoice approval
9. Al-assisted contract closeout

Adapted from Intelligent Contracting
By Vernon Myers, Col., USA (Ret.);
Our Team

**Amit Verma**  
Head, Research  
Ph.D. candidate at the IIT-India. Research interests include Natural Language Processing, Collective Intelligence, Collaborative Knowledge building, and Open-Source software development. Worked on core NLP problems with large-scale datasets (mostly Wikipedia), specifically on efficient representation and extraction of the datasets of online collaborative portals. Developed various open-source libraries for scientific analysis of Online Collaborative Portals.

**Arshad Siddiqui**  
Head, Engineering  
Machine Learning professional, experienced in creating end to end Artificial Intelligence (AI) enabled products. Background in academic research in machine learning and have written peer-reviewed papers for various international conferences in the domain of Machine Learning and Computer Vision. Expertise ranges from Natural Language Processing to Computer Vision. Has worked with several companies to get their products AI-enabled and viable to be used in real world applications.

**Naren Kadali**  
CTO  
20+ years of experience in program management, product management, business transformation and strategy for small to large enterprises. 
Experienced in product design, technology solution delivery, business process improvements, and business analytics, Deep expertise in bringing automation, simplification, and the power of technology to transform business processes.

**Gary Wheeler**  
COO  
IT professional with 25+ years experience leading cross-functional people and project teams, implementing innovative technology solutions that solve enterprise challenges, and driving business value. 
A pragmatic leader with a deep understanding of business, Legal and IT functions, combines a strategic perspective with operational thinking and common sense. 
Passionate about digital transformation and using technology to solve complex business problems.

**Shesh Mathur**  
CEO  
Over 20 years of experience in technical program management, operations, BPM, and business strategy engagements with corporations, SMBs, and startups. 
Particularly experienced in Contract Lifecycle Management (CLM), project planning & delivery, software implementations, and business process improvements. 
Passionate about solving business problems in the most expeditious, simple, and elegant manner. I use this philosophy as the guiding principle to implement and deliver successful projects for clients.