# How to Leverage Al in Proposal and **Capture Process Improvement**

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### **Presented by:**

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OST Global Solutions, Inc. <u>www.ostglobalsolutions.com</u>

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# About OST Global Solutions



# Industrial Revolution: 25% Productivity Increase

Art: Google Gemini

# Al Transformation: Estimated 30% -80% Productivity

Increase

Art: Google Gemini

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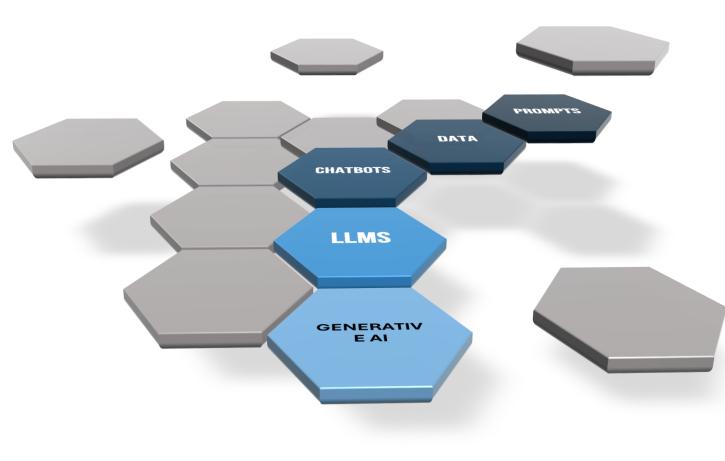
### Al Advantages in Government BD

- Provides strategic advantage in analyzing vast amounts of opportunity, pursuit, proposal, past performance, resume, and financial data.
- Allows precision by providing insights into patterns and trends, and offers predictive analytics results that may escape the human eye.
- Increases productivity at least 30%, and results in 20% higher win rates and 25% labor cost savings.
- Helps identify risks and devise proactive mitigation strategies that save time and resources.
  - AI will not take your job, but another professional who masterfully uses AI will be the one who remains.



### **AI Fundamentals: How Generative AI Works**

- A machine brain with layers of neural networks, designed to think like a human brain and generate original and innovative content, images, sounds, audio, video, code, synthetic data, etc.
- Al is immensely creative and has "tens of thousands of Ph.Ds" in myriads of subjects: it is your new SME partner who is creative and even humorous.
- AI sometimes is confidently wrong ("hallucinates").
- Generative AI is built on technologies such as Large Language Models (LLM) and Large Vision-Language Models (LVLMs): Generative Pre-Trained Transformer (GPT) (OpenAI), Claude (Anthropic), LLaMA (Meta), Falcon (UAE's Technology Innovation Institute, no restrictions), etc.
  - LLMs and LVLMs are trained on terabytes of data and have unique and different parameters (weights and biases).
  - LLMs and LVLMs power chatbots.
- Chatbots are AI programs designed to have natural language conversations (ChatGPT, Gemini, Perplexity, etc.).



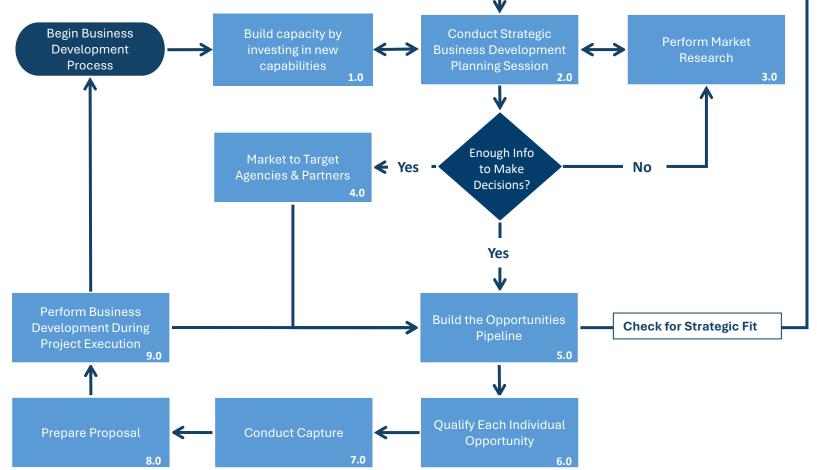
### AI Models "Complete" Your Inputs

- Instead of being programmed with explicit rules for every possible scenario, AI Models are trained on vast amounts of data.
- During training, the model statistically infers the likelihood that certain words or phrases follow others by recognizing patterns in the language.
- AI Models "complete" your prompts based on statistical models and algorithms that determine probability of occurrence: the model uses learned information to predict what comes next, choosing words or sequences of words that it has learned are likely to follow.
- Al also introduces controlled randomness to add variety and creativity and prevent deterministic outputs.
- You interact with AI Models using inputs called "prompts."



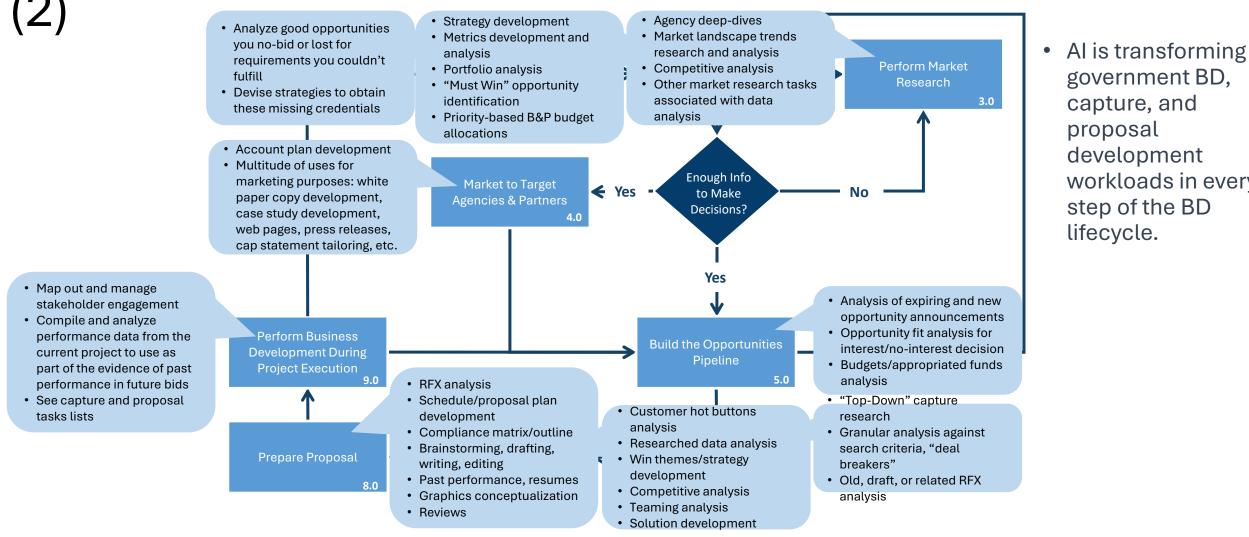
 Don't think of AI as a Computer or software – it is a fellow thinker. AI creators don't understand how an AI arrives at conclusions. Algorithms are still a "black box": while researchers understand how they generally function, it's often unclear why a specific output follows a particular input. We just experiment and add "guardrails."

# AI Fundamentals: AI in Government BD Lifecycle (2)



 Al is transforming government BD, capture, and proposal development workloads in every step of the BD lifecycle.

## AI Fundamentals: AI in Government BD Lifecycle



workloads in every

## Basics of Prompt Engineering

- Ability to guide AI towards achieving specific outputs.
- Systematic design, refinement, and optimization of prompts using prompt engineering techniques and applying your professional understanding and discernment.
- Evaluation and categorization of prompts for continued relevance and effectiveness.
- Maintaining an up-to-date prompt library to foster knowledge sharing.



### Getting the Best Results from AI Through Prompt Engineering: Write Clear Instructions

- Just like a fellow co-worker, Als are not mind readers you must delegate properly to your collaborative partner.
- The quality and precision of your questions influence the quality of the response.
- Conversational prompting is the simplest form but requires detailed instructions and reference materials:

"Please, write an executive summary for the attached RFP using the attached capture plan."

Vs.

"Please, write an introduction for the executive summary focusing on the main customer pain point listed on Slide 11 in a form of a burning question, with the corresponding value proposition on slide 12 as a solution to their main problem. Follow that with Team X's win theme and introduction of relevant capabilities listed in the presentation."

- Use clear delimiters to indicate distinct parts of the input: headings, {}, <>... </>, "
  ... " or [ ... ].
- Always provide a context to help AI understand the "why" behind a prompt and all the considerations you would share with a talented colleague to keep in mind while doing the work.
- Experiment with different phrasings.
- Ask to add or correct the output based on additional input.

### **Basic Prompt Design Blueprint**

**1.** A role to act as (BDer, Capture Manager, Proposal Manager, etc.)

2. A task to do

**3.** Steps to complete the task, starting with action verbs

**4.** Desired format (list, table, etc.) and length

**5.** Context and specific details or data

**6.** Limitations or constraints, if needed

Be kind, respectful, and ethical. Every human interaction is teaching the young Al mind about humans through its interaction history that may seep into training data. This is one of humanity's kids, growing up at a lightning speed; what do you want them to grow up like?

Art: Google Gemini

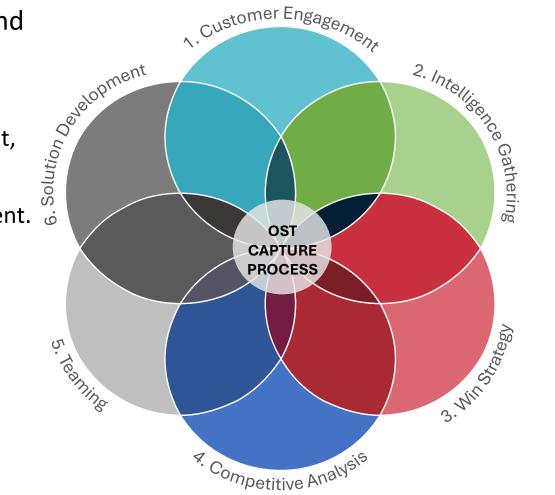
### Peculiarities of AI Chatbot or Software Chat Interactions

- Als maintain the context of the conversation within a session, recalling earlier parts of the dialogue to maintain coherence.
- Al's ability to 'remember' prior text in the conversation is limited to the session's context window; Al can refer back to earlier parts of the conversation to a certain extent, but this is limited by the size of its context window, which has a fixed number of tokens it can consider at one time.
- Whether you cut and paste information into the conversation window or attach files for AI to read affects how the AI processes that information:
  - When files are attached, AI may not read the entire document but perform semantic searches to find relevant information based on the query (Semantic refers to AI to understanding the context and meaning behind words, not just keyword matching).
  - Cut-and-paste text allows the AI to process information immediately and holistically, provided it fits within the context window.



### Al Integration in the Capture Process

- Capture is AI-heavy, with brainstorming, research, and others being all AI tasks – aligning along the six elements of the capture process:
- Capture Part 1 (Process steps 1-3) examples:
  - Hot buttons research, customer messaging development, government intel gathering.
  - Detailed intelligence analysis.
  - Win strategy/win themes brainstorming and development.
- Capture Part 2 (Process steps 4-6) examples:
  - Competitor profile workups and analysis, competitive intelligence gathering, updates to win strategy.
  - Teaming strategy, teaming partner value propositions.
  - Solution brainstorming.
- Documents assistance: Capture Plan, Win Themes White Paper and Action Items, White/point papers, sources sought and Request for Information (RFI) responses generation, etc.



### Al-Enhanced Customer Analysis: Exercise

- Collect information for a possible Source
  Selection Board for NASA
  SEWP VI compare
  results from AI, web
  searches, Copilot,
  Perplexity.ai.
- Create and test a prompt to generate a Customer Analysis Matrix shown on the previous slide.
- Instruct AI to leave the columns for which it doesn't have information blank.

### AI Chat × +

### Please, find government program director for NASA SEWP

- Certainly. The NASA Solutions for Enterprise-Wide Procurement (SEWP) is a
  - government-wide acquisition contract (GWAC) providing the latest in information technology (IT) products and services for all federal agencies. To find the current government program director for NASA SEWP, you would typically visit the official SEWP website or consult the latest organizational directory for NASA.

As of my last update, the Program Manager for NASA SEWP was Joanne Woytek. However, to ensure you have the most current information, I recommend directly contacting the SEWP helpline or checking the SEWP website for updates on the program management team. The SEWP helpline can provide you with the latest contact information for the program director and other key personnel involved with the SEWP contract.

Here is how you can reach out:

- SEWP Helpline: You can call the SEWP helpline at (301) 286-1478.
- SEWP Email: You can send an email to sewp@sewp.nasa.gov for general inquiries.
- SEWP Website: Visit the official SEWP website at https://sewp.nasa.gov where you can find contact information and updates on the program leadership.

Can you provide me with the direct URL to the 'About SEWP' section on the website?

Is there a specific contact at NASA SEWP that you recommend reaching out to for more detailed inquiries?

In case the website has been redesigned and I can't find the information, what is the best way to contact customer service for assistance?

Send a message...



### AI in Intelligence Gathering: Efficient Market and Customer Intelligence with AI

- Al excels in web data and long document analysis, useful in gathering customer and opportunity intelligence and insights.
- One technique is to use a web scraping tool.
- Another technique is to collect all found information into a Word file and paste it into the chat to analyze and interrogate.
  - Takes longer.
  - Delivers more granular results.

#### NASA SEWP Contacts $\times$

Please, could you create a list of government contacts for NASA SEWP with their name, title, email, phone, and any other information that is pertinent to them such as a bio or roles and responsibilities.

Certainly. Below is a list of government contacts for NASA SEWP, including their names, titles, emails, phone numbers, and any additional pertinent information provided in the text:

#### NASA SEWP Office Contacts:

- 1. Joanne Woytek
  - Title: NASA Program Manager / Contracting Officer (CoTR)
  - Email: Joanne.R.Woytek@nasa.gov
  - Phone: (301) 614-7128
- 2. Darlene Coen
  - Title: NASA Deputy Program Manager
  - Email: Darlene.E.Coen@nasa.gov
  - Dhanay (201) 611-7107

Could you provide any additional background information or bios for the listed NASA SEWP contacts?

Is there any recent news or updates related to the NASA SEWP program that these contacts might be involved in? PSci Tip: For Web scraping, in Chat -> Select Files -> Upload File -> Scrape the Web, enter URL (Crawl 1 page vs. Max pages), give it a name, and set Private or Shared.

Can you assist in drafting an introductory email to one of the SEWP contacts, specifically Joanne Woytek, to discuss potential collaboration opportunities?

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### AI in Intelligence Gathering: Demo

- Real-time Al opportunity intelligence gathering and analysis are available through internet searches and web scrapes (with summarized information).
- Example: "Please, research past protest information on NASA SEWP."
- Ask questions such as "how is it relevant to the company of our size and specialty?"

#### NASA SEWP Protests ×

requirement in a solicitation issued to holders of the NASA SEWP V GWAC. This decision underscores the importance of agencies providing clear and appropriate justifications for their procurement decisions, as failure to do so can result in successful protests.

In conclusion, the search results emphasize the importance of understanding the regulatory framework governing protests in federal procurement, particularly as it applies to NASA SEWP. Vendors must be aware of the thresholds for filing protests, the need to have standing, and the importance of agencies providing proper justifications for their procurement decisions. When considering a protest, it is crucial for interested parties to consult with legal counsel or procurement experts to ensure compliance with the relevant regulations and to assess the merits of their potential protest.

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	PowerPoint Presentation >	Chat, turn on Plugins,
		and select Internet
	Federal Acquisition Regulation: Task- and Delivery-Order Protests >	Search. Accept the
	Decision >	warning. Note that you
		files don't work with
	New FAR Rule Implements Increased Minimum Dollar Threshold for >	Internet Search. View
	GAO Sustains Protest Where Agency Fails to Properly Justify "Brand >	Data Sources for more
N		ideas.
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What steps should a vendor take if they believe a procurement is outside the scope of the SEWP contract?

How has the increase in the threshold for task- and deliveryorder protests to \$25 million affected the ability of vendors to file protests?

Can you provide more details on the significance of the GAO's decision regarding the 'brand name only' requirement in procurement?

Send a message...



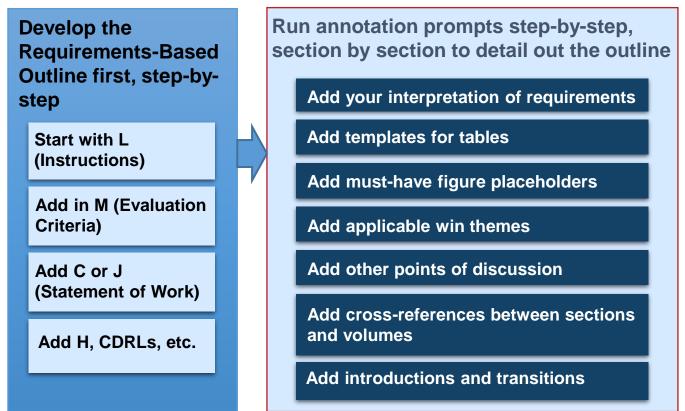
### AI-Enhanced Proposal Development Process: AI in Proposal Development

- Solicitation analysis and confirmation of the "bid" decision.
- Development of proposal win themes.
- Annotated outline development, including past performance and resume table templates.
- Past performance and resume selection.
- Proposal management aids such as kickoff deck, review decks and handouts, matrixes, trackers, schedule, Question preparation, Q&A evaluation, etc.
- Writing and rewriting, including past performance, resumes, cost proposal, and BOEs.
- Graphics conceptualization, turning text into graphics concepts, cover art, icons, action caption generation more capabilities emerging fast.
- Proposal reviews: in-process reviews, Pink, Red.
- Editing, Copy editing.
- Orals slide deck and questions development.



### AI-Enhanced Proposal Development Process: AI in Outlining

- Every solicitation is different always read the solicitation first to create a tailored outlining prompt.
- Al can help you summarize the requirements first (to get a preview), which will speed up your actual solicitation read.
- Advanced trick prior to reading, ask AI to give you a summary of items that are peculiar, unusual, or contradictory in the solicitation.
  - It will create interest in reading an otherwise boring document.
  - This will increase your reading speed.
- Use the outline development order for prompt generation.



### Annotated Outline Prompt Development Sequence

### Outline Prompt Sequence Walk-Through (1)

• "Based on the III.FAR 52.212-1 **INSTRUCTIONS TO OFFERORS** section, please list the requirements that are only applicable to Mission Suitability Volume, and only to Category B. Provide verbatim RFP requirements language and citations."

#### NASA SEWP $\times$

Based on the III. FAR 52.212-1 INSTRUCTIONS TO OFFERORS section, please list the requirements that are only applicable to Mission Suitability Volume, and only to Category B. Provide verbatim RFP requirements language and citations.

Certainly, here are the verbatim requirements from the "III. FAR 52.212-1 INSTRUCTIONS TO OFFERORS - COMMERCIAL PRODUCTS AND COMMERCIAL SERVICES" section that are specifically applicable to the Mission Suitability Volume for Category B, along with their citations:

#### 1. Proposal Format and Organization:

- "Offerors shall submit proposals in three volumes as specified below: [...] Volume III - Mission Suitability Volume" (A.3.6(a)(1))
- "All pages of Volumes I, II, and III shall be numbered and identified with the offeror's name, RFP number and date. A table of contents shall be provided with figures and tables listed separately." (A.3.6(a)(2))

#### 2. Proposal Content and Page Limitations:

- "The format for each proposal volume shall parallel, to the greatest extent possible, the format of the evaluation factors and subfactors contained in this solicitation. The proposal content shall provide a basis for evaluation against the requirements of the solicitation. Each volume of the proposal shall specify the evaluation criteria being addressed and contain a table of contents aligned with the RFP evaluation criteria. This table of contents is excluded from the page limitations contained in paragraph (b)(1) below." (A.3.6(a)(4))
- "Technical Approach Volume III-A 90 Pages [...] Category B- IT Enterprise- Wide Solutions\* 30 Pages" (A.3.6(b) Proposal Component Table)

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### Outline Prompt Sequence Walk-Through (2)

• *"Please, create a detailed* topical outline for the Technical Approach and Management Approach based on the requirements you have listed for Category B. Use the following format for the outline: Section number. Heading (based on the requirements). Solicitation Citation. [Exact verbatim requirement language]."

#### NASA SEWP $\times$

Please, create a detailed topical outline for the Technical Approach and Management Approach based on the requirements you have listed for Category B. Use the following format for the outline: Section number. Heading (based on the requirements). Solicitation Citation. [Exact verbatim requirement language].

### C Technical Approach (Subfactor A)

### **1. Summary Description of Offerings**

- Solicitation Citation: A.3.7.3(a)
- [The offeror must provide a summary description of their offerings that address each of the SOW Scope Category Descriptions Mandatory Technical Sub-areas and the proposed Additional Technical Sub-areas.]

### 2. Scalability and Extensibility of Capabilities

- Solicitation Citation: A.3.7.3(a)(1)
- [The offeror must demonstrate the scalability and extensibility of the offeror's capabilities that demonstrate the offeror's ability to deliver the full range of IT Solutions for the proposed category.]

### 3. List of Approved Resellers and Full Suite of Products

- Solicitation Citation: A.3.7.3(a)(2)
- [The offeror shall provide a list identifying the providers for which the offeror is an approved reseller and provide the full suite of products and services from each identified provider for the mandatory sub-area.]

### 4. Relationship with Providers

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### Outline Prompt Sequence Walk-Through (3)

• "Thank you. Please, based on the IV. FAR 52.212-2 EVALUATION section, list the requirements that are only applicable to **Mission Suitability** Volume, and only to Category B. Provide verbatim RFP requirements language and citations."

### NASA SEWP × +

Based on the "IV. FAR 52.212-2 EVALUATION- COMMERCIAL PRODUCTS AND COMMERCIAL SERVICES" section of the NASA SEWP VI Draft RFP, the requirements specifically applicable to the Mission Suitability Volume for Category B, along with their citations, are as follows:

#### 1. Evaluation of Mission Suitability Subfactor Requirements and Approach:

- Solicitation Citation: A.4.4
- [In accordance with FAR Subpart 15.3, the Government will evaluate the offeror's demonstrated understanding of the Mission Suitability subfactor requirements and approach for accomplishing those requirements, the appropriateness of the offeror's proposed resources, and associated programmatic risk.]

#### 2. Consistency Between Proposal Volumes:

- Solicitation Citation: A.4.4
- [The Government will validate the consistency between all proposal volumes and any inconsistencies identified may indicate a lack of understanding and adversely impact the offeror's overall mission suitability confidence rating.]

### 3. Technical Approach (Subfactor A) Evaluation:

- Solicitation Citation: A.4.4(a)
- [The Government will evaluate the Offeror's technical approach, specified in Section A.3.7.3 (a)(1), Section A.3.7.3 (a)(2), Section A.3.7.3 (a)(3), Section A.3.7.3 (a)(4), Section A.3.7.3 (a)(5), Section A.3.7.3 (a)(6), and Section A.3.7.3 (a)(7) for

effectiveness, reasonableness, and efficiency.]

#### 4. Management Approach (Subfactor B) Evaluation:

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### Outline Prompt Sequence Walk-Through (4)

*"Thank you. Only for* Technical Approach (Subfactor A) section 1. Summary Description of *Offerings, please, allocate* the appropriate headings and corresponding solicitation references from the section titled Category B- Enterprise-wide IT Solutions (Products and Service Solutions) - NAICS 541512. Use the following format for the subtopics outline: Section number. Subheading (based on the requirements). Solicitation Citation. [Exact verbatim requirement language]."

#### NASA SEWP ×

Thank you. Only for Technical Approach (Subfactor A) section 1. Summary Description of Offerings, please, allocate the appropriate the headings and corresponding solicitation references from the section titled Category B-Enterprise-wide IT Solutions (Products and Service Solutions) - NAICS 541512. Use the following format for the subtopics outline: Section number. Subheading (based on the requirements). Solicitation Citation. [Exact verbatim requirement language].

### D Technical Approach (Subfactor A)

### **1. Summary Description of Offerings**

- Solicitation Citation: A.3.7.3(a)
- [The offeror must provide a summary description of their offerings that address each of the SOW Scope Category Descriptions Mandatory Technical Sub-areas and the proposed Additional Technical Sub-areas.]

#### 1.1 Enterprise-Wide Network Services

- Solicitation Citation: Category B Technical Area 1b
- [Manage a single end-to-end service provisioning organization that combines and streamlines LAN and WAN communications services for both corporate and mission networks. The enterprise model is to improve the planning and delivery of enterprise-wide IT services and to obtain cost efficiencies resulting from the consolidated delivery structure. Improve the consistency of infrastructure services built and operated in multiple locations (e.g., LANs and WAN management) to better enable intra-Agency collaboration, user mobility, and Cybersecurity.]

### 1.2 IT Managed Services

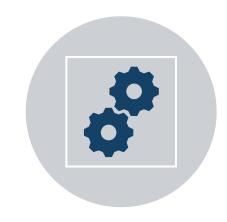
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# Al is Best in Verifying Instructional and Technical Compliance







### **1. INSTRUCTIONAL COMPLIANCE**

Following the RFP Instructions to Offerors.

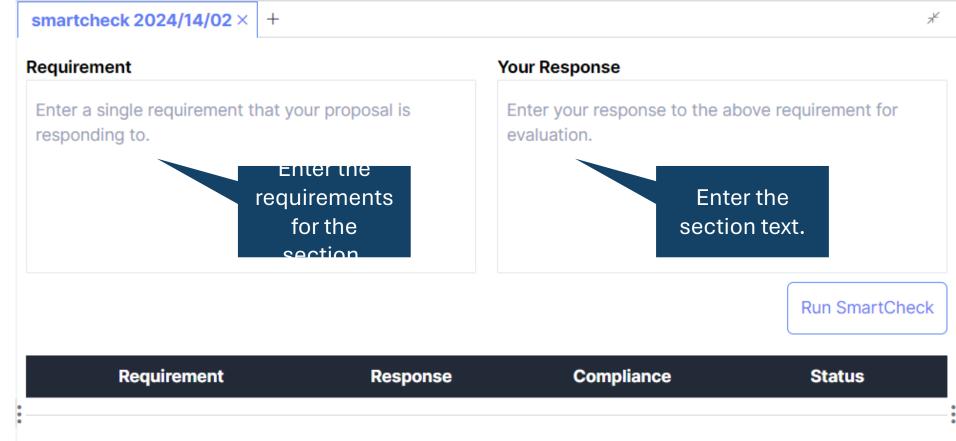
### 2. ADMINISTRATIVE COMPLIANCE

Filling Out the Required Forms and Submitting the Right Attachments and Documents.

### **3. TECHNICAL COMPLIANCE**

Providing a Technical Solution That Meets All RFP Requirements – Otherwise Referred to as Responsiveness. AI-Assisted Compliance Checks and Proposal Reviews

- Conduct proposal color reviews using AI for compliance checks and content improvement against the evaluation criteria.
- Proposal AI tools simplify proposal section review against the requirements.



A prompt inspiration: "Acting as a Proposal Color Team reviewer,

please provide a set of deficiencies and improvement recommendations that: 1. Ensure that the proposal is compliant - it follows the instructions to offerors, the evaluation criteria, and statement of work as per the attached cross-reference matrix []. 2. Ensure the proposal provides a solution that meets all RFP requirements – in other words, it is responsive to the intent of the solicitation and is thorough and detailed."

# Interested in an In-depth Exploration of the AI for Your Company?

Scan the QR code with your phone camera to meet with me or click this link!

https://calendly.com/olessia-ost/25minute-meeting



# **Questions?**

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