



Beyond Conventional Boundaries- AI and Predictive Analytics in Project Controls

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OCFO

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Let's start at the beginning....





Enter some years ago, now I have some first hand knowledge....



How Information Changed & Built

AUGMENTED INFORMATION DELIVERY

Not only knows the information, but knows how to put it all together

INTERNET OF THINGS ERA

Growth of Capabilities, strategic problem solving.
AOL Chatrooms, everyday life bones were built

1980S

computerized connectedness, document word processing, searches

LITTLE HOUSE ON THE PRARIE

paper information, books, indexes, encyclopedia, library, inter-library card catalog

What's the difference?



TRADITIONAL

VS

QUANTUM

1 Code: XML, JSON, CSS, hardware

2 Traditional Software

3

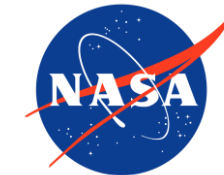


1 Code: XML, JSON, CSS, hardware, code interpreter

2 Traditional Software + Large Language Model + Action Feature

3





What's the difference?





CIO Guidance on Generative AI

- Currently, NASA has **not authorized** the operation of generative AI technologies (e.g., [OpenAI](#), [ChatGPT](#), Google Bard, Facebook Llama, or similar) for widespread use **on sensitive NASA data**.
 - NASA follows existing federal requirements and processes to ensure NASA data is appropriately protected. At this time, these evaluations have not been conducted at NASA and/or across the federal government for Generative AI systems.
 - This means that today, individuals at NASA are **not authorized to share, upload, or otherwise expose sensitive Agency data to ChatGPT or any other generative AI capability**. Until the Agency formally approves their use, individuals at NASA are not authorized to use them in any way that may implicate NASA data, devices, and/or networks.
 - Employees may **not use NASA emails to register** for personal [GenAI](#) access.
 - NASA employees may **not download any client-based Generative AI** tools, until those tools are authorized.
- NASA employees **may access generative AI personal accounts** via browser-based interfaces, following acceptable use policies, and only use **public, non-sensitive data**.
- NASA employees may also consider careful experimentation with generative AI capabilities using **personal devices** provided they **do not use NASA non-public or sensitive data** with these systems.
- If NASA employees use the outputs of Generative AI systems for any purpose, they should **thoroughly check and validate the results** because quality of outputs for these systems is still uncertain.
- <https://nasa.sharepoint.com/sites/cio/SitePages/Use-of-Generative-AI.aspx>
- Acceptable Use Policy: [NPD 2540.1K - main \(nasa.gov\)](#)



Summarized CIO Guidance

Summary of Current Guidance RE: Gen AI

- Without implicating sensitive, non-public NASA data, **You may...**
 - ...Use NASA devices to access personal Gen AI accounts
 - ...Use personal devices to experiment with Gen AI
 - ...Participate in formal NASA controlled tests of Generative AI
- **You may not...**
 - ...Expose / upload sensitive, non-public NASA data to Gen AI systems
 - ...Use NASA email to register for un-approved Gen AI systems
 - ...Download client applications for Gen AI systems
- **You should...** Verify / validate / judge outputs of Gen AI to check for quality

Current Guidance

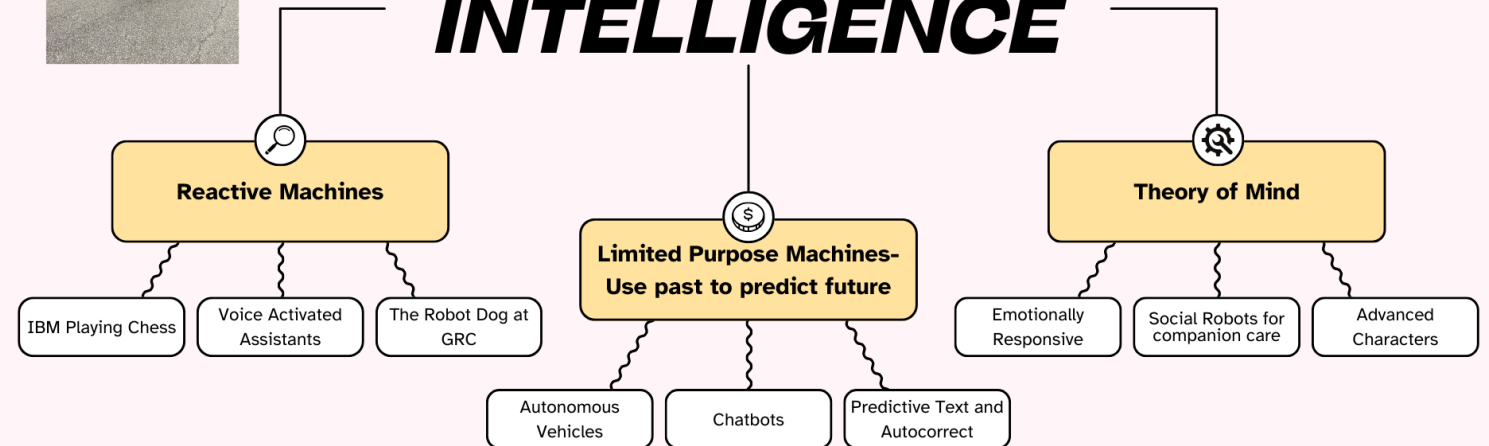




What's under the hood!



AUGMENTED INTELLIGENCE



At this time, no self-actualized technology exists.





PM-PAL



PM PAL

By Erin Wood 人

Expert on call in all things NASA PM, PP&C, and EVM



How is it performing



Test 1

- 94% Success of Operation



Test 2

- 96% rate of duplication



Test 3

- Qualitative Analysis Underway



Test 4

- Planning Stages



Test 5-Infinity

- Challenges and Opportunities

Helpful Hints





Q&A

Thank you for your time!