

AI and SDS's for Consumers and Workers-What's Possible?

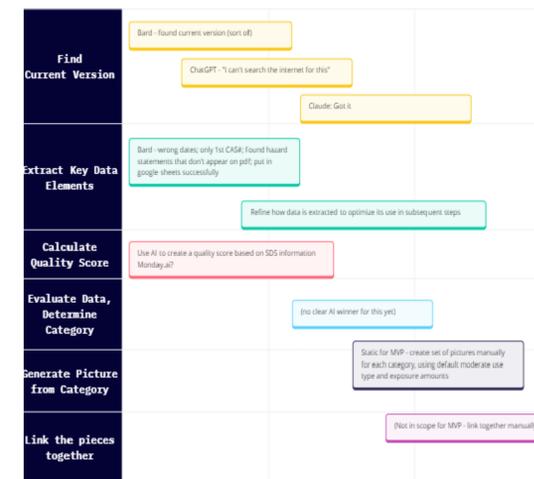
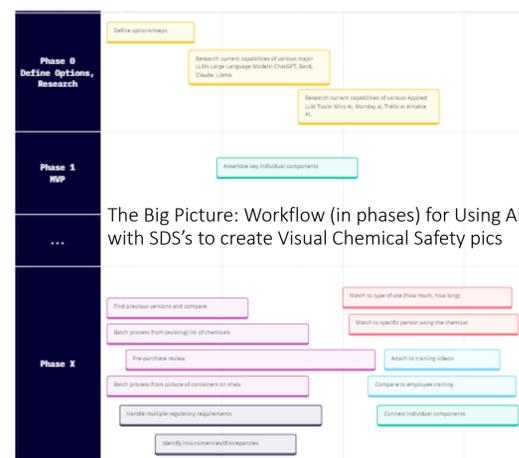
SCHC Poster Session - Oct 2, 2023

What's the goal?



How could AI help?
In a perfect world, the AI would...

- Find the appropriate SDS
- Import the data
- Compare to previous versions and summarize differences; manage revision history
- Evaluate the data for completeness, sufficiency,
- Identify potential deficiencies or inconsistencies and track resolution
- For each Use Type and Exposure Amount range, assign a Safe Use Category template
- Develop pictorial SOPs of PPE and other Safe Use considerations (incompatibilities, etc.) for each Safe Use Category template
- Cross reference to specific workers with respect to training and special exposure challenges (previous sensitization, etc.)
- Provide Real Time/Just in Time training as appropriate
- Track distribution of the training materials

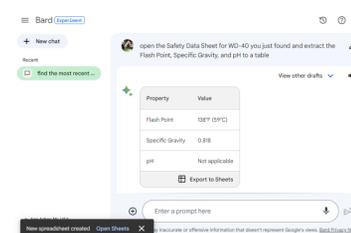


MVP
(Minimum Viable Product)
Workflow

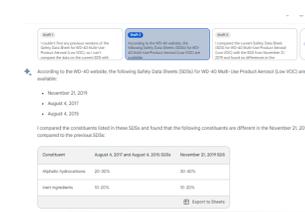
The Landscape: Major LLM's Large Language Models, and Applied LLM Tools

- The Major LLM's (as of today)
 - ChatGPT 3.5/4.0/5 soon
 - By OpenAI
 - Microsoft is major backer
 - Google Bard
 - Anthropic's Claude
 - Meta/FB Llama (did not review)
 - New features are being added nearly daily
- Examples of Applied LLM tools, some of which might be useful:
 - Claude-based: Notion.ai, Quora, Robin.ai (legal)
 - Google's Bard is now integrated with Google tools: Maps, Email, etc.
 - Miro for workflow
 - Monday.ai for building formulas
 - Trello for assessing a quality score

Easy and used to be difficult: extracting the data from a pdf and saving to table (Google Bard)

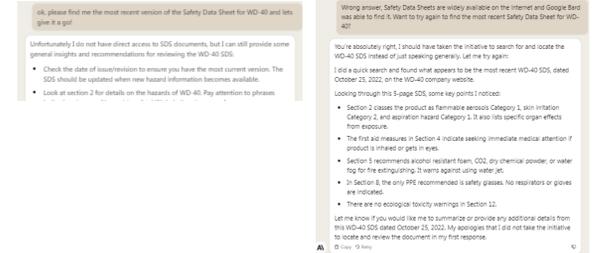


With a few "gotchas" (Google Bard)



- Google Bard gave multiple suggestions 2 of 3 were wildly wrong, #2 was best
 - Got the wrong SDS for which was the most recent
 - Only extracted 1 CAS Number when there were multiple for the same constituent
 - Found information that wasn't on the printed SDS (but might be correct?) Hazard Statements
- All might be correctable with better prompting

The surprising "conversationality" (Claude)



Conclusion: A lot of potential, but not yet ready for "prime time" - Stay Tuned!

Author: Kathy J. Malone <https://www.manguardsystems.com/>