IT2024 Project Progress Report

November 8, 2024

1 Progress Report Presentation

Session 1 (Nov 8, 2024: 19:00 − 22:20)

1. Russell Tseng, In Search of USA Customs Law on Technology Products by Large Language Models. (Presented)

2. Simon Chen, Agent-Based Workflow Design & Supply Chain Optimization : A Case of n8n System. (Presented)

3. Edmond Tsai, Synthesizing Videos by Generative AI Tools : A Case of Runway. (Presented)

4. Nancy Wu, DocPie – A Legal Contract Generator, Assessor & Advisor. (Presented)

Session 2 (Nov 15, 2024: 18:50 − 20:20)

1. T. Lin, Fantasy Basketball : A Coach Tool for Managing Basketball Players.

2. Kemmer Wu, Learning English by AI Tools.

3. Ken Lin, On Midjourney.

2 JS General Comments

- The contents presented by Tseng, Chen, Tsai and Wu are very good, as their contents are based on their personal experiences and understanding in the use of those AI tools.

- Those experiences are essential and should be entitled as *case studies*.

- Some instances of your use of those AI tools with unsatisfied results should be included in the reports and the presentation slides.

- Those instances with satisfactory results should be included in the reports and the presentation slides.

- The works to be done in the next half of the semester should be highlighted.

- The format of a professional conference paper will be introduced in the coming lecture(s).

- The organization of the contents is not formal. Your written reports cannot considered as a report. Based upon the four presentations, a suggested outline is given below.

    – Title of the report.

- Abstract : A concise summary of the contents presented in the report.
  - Introduction : State the AI system to be investigated and the reason(s) (resp. motivation(s)) why you are interested in this system. Finally, introduce what you are going to present in this report.
  - XYZ System : State the task(s) you want the XYZ system to complete and present results obtained.
  - Comments on the good and bad sides of XYZ system.
  - Additional comments and discussions.
  - Conclusion : A summary of what you have presented in this report.

- Completeness is what I score the most.

- Further comments from JS will be added in the coming lectures.

3 Specific Comments

3.1 Rusell Tseng

- Report title should be revised. You could consider the title I put for your presentation '*In Search of USA Customs Law on Imported Technology Products by Large Language Models*'.

- If you would like to add your experiences on the use of those AI tools for picture or video generation, you could put the report title simply as 'Use of AI Tools for Customs Law Survey and Image Generations'.

- The heading of Section 1 could be shorten as 'Use of Gemini for My Work'.

- The heading of Section 2 could be changed to 'USA Customs Law on Imported Technology Products'.

- A follow-up work is to get the information without any error. Likely, you will need to access the homeages from USA Customs.

- Please note the time (in term of days or weeks) spent on this task.

- Highlight the benefits of using the large language models for your search. If you have conducted the search without using any LLM and eventually got the information, its time spent as compared with the time spent with large language models can be found and stated in the report.

3.2 Simon Chen

- I have to say that, your summarization on the differences between *AI Agent* and *Gen AI* is a good work. Although, I have some comments on it.

- As mentioned in the lecture, your original report title is too long and confusing. After your presentation, I would suggested that the title should be changed to 'Agent-Based Workflow Design & Supply Chain Optimization : A Case of n8n System'.

- It should be noted that the use of the term *agent* can date back to a book entitled *Society of Mind* authored by Marvin Minsky in 1986. Moreover, agent is usually associated with the terms *mobile agent*, *intelligent agent* and *multi-agent* throughout the late 1990s to today.
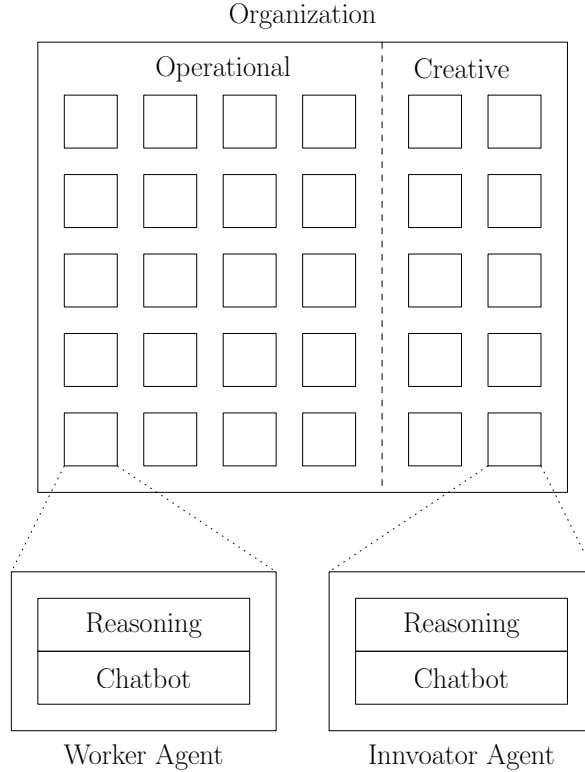
Figure 1: Five-Stage framework from OpenAI. Each worker agent is able to plan a workflow for completion of a job. Each innovator agent is able to generate hypothesis and plan for a workflow to validate the correctness of the hypothesis. Organizational level agents are able to generate goals and plans for an organization. Besides, they are able to orchestrate (select and coordinate) both the worker agents and the innovator agents to complete the tasks in accordance with the goals. It should be noted that the names of the products to be delivered under this five-stage framework should better be called 'chatbot agent', 'chatbot agent with reasoning and planning', 'working agent', 'innovator agent' and 'organizational agent'. All of them are agents.
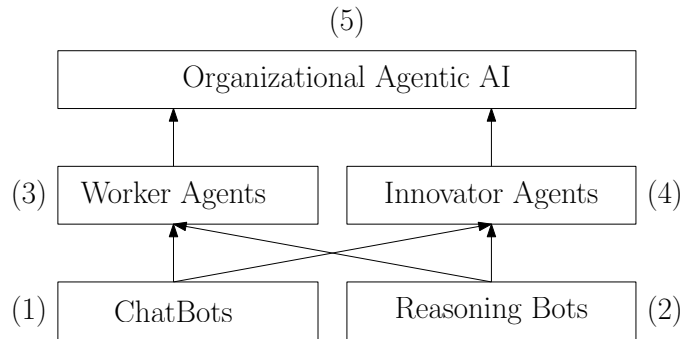

Figure 2: OpenAI five-phase development plan. The order of the phases is shown by the numbers with parentheses. In each phase, multiple bots/agents are developed. Each agent could be integrating (resp. accessing) multiple chatbots and reasoning bots for solving problems specified by the agent-level users. By the same token, an organizational agent could be integrating (resp. accessing) multiple worker agents and innovator agents for solving even complex problems by the organization-level users.

3

- Clarification of the key concepts behind these terms is definitely helpful if you have enough time to do so.

- The work you are going to proceed should be belongs to a research area called *agent-based modeling*.

- The sources on those diagrams appeared in your report have to be cited.

- The 5-Level diagram for the artificial general intelligence (AGI) should be removed. Instead, the diagram I put on the white board should be added, as shown in Figure 1. It is better named this as a five-stage (or five-phase) framework for business/industry AI development. It is somehow related to artificial general intelligence (AGI). But, it is better not to relate this framework to AGI. The planning task is basically a workflow design task.

- Try to use the n8n system to do what you want to do and what you want to tell us.

- Basically, conducting a survey on just *Agentic AI* is already rich enough. The work could kill you.

3.3 Edmond Tsai

- Your explanation on your motivation on investigating AI video generators is a good job.

- You have from time to time highlighted the restrictions on the use of the Runway for video generation. This part is also good.

- As there are restrictions for free-to-use of Runway, it is suggested that you could add YouTubers' videos which share on the use of Runway in your presentation. If you would like to introduce other video generators, you could do the same thing. The contents regarding these YouTube videos do not have to be added in your written report. In the report, you can simply add a sentence like the following.

  There are many similar AI video generators. To have ideas how to use them, readers could access the following URLs [x][y][z][a].

  Each [x] corresponds to an URL cited.

- Many contents presented are valuable. But, they have not been added in your report. For instance, in the last part of your presentation, you have commented on different short video generators. This part is valuable and worth to be added as part of your written report.

3.4 Nancy Wu

- Your use of the *Academic Sisters & Brothers* is confusing.

- In regard to your comments on the limitations of the DocPie, please add real examples with your text inputs and its text outputs. Those examples could possibly let us investigate the reason(s) why it fails.

- Dig in if there is any report presenting the technical detail of the DocPie system.

- Figure out if DocPie is the only legal contract generator and advisor system in the world. Clearly, it is not.

- Find similar system(s) available for use in other countries.

- You writing is the best among the other written reports presented tonight.