



Is an AI Based Second Brain the Best Path? Rethinking AI Solutions with Agile Thinking

In my last post, *In the Age of Information Gluttony*, I shared how easy it is to become buried under an avalanche of content, videos, papers, tutorials, articles, podcasts, you name it. Recently I came across Chris Lettieri's excellent and thought provoking article, "Self-Organising Second Brain: How I Manage Information Overload". He lays out an AI-driven system for managing notes and research, which looks like the ideal solution to digital information overload.

The idea of building a "second brain" is compelling, it promises smart knowledge extraction, organisation, and retrieval. But as I learn and absorb the tools I've been developing using CrewAI (including a Research Writer, Fact Checker, and CV Tailoring assistant, among others), I can't help but ask: is building a second brain the right path for me?

I am not a professional IPython developer (although my AI companion helps to fill the void) but coming from a background in data/information management and computer sciences, including a digital transformation and agile delivery, I've learnt that sometimes the smarter move is to start small.

Why Agile Thinking Matters

Over the years, I've seen plenty of ambitious innovation projects fail, not because the ideas were not good, but because they tried to achieve too much at once. Agile methodology, if correctly executed, has mostly served as a useful counter to that mindset. It's built on short feedback loops, iterative learning, and the acceptance that our initial ideas, scope and requirements, will probably change throughout the course of the project.

AI product development is no different. If anything, it demands even more flexibility. Generative AI is incredibly capable, but also unpredictable. It can sound convincing while being completely wrong (we've all seen those infamous "hallucinations"). Building incrementally, one tested sprint at a time, should let us catch those issues early, before they become baked into a larger system.

My Personal Lessons from CrewAI

In recent months, I've used CrewAI to develop a handful of tools, including:

- A "Research Writer" that drafts content using curated sources
- A "Fact Checker" for validating claims
- A "Financial Analyst" for stock and portfolio insights
- A "CV Tailoring Tool" to adjust résumés to specific roles
- An "LLM Document Training Tool" using RAG (Retrieval Augmented Generation)

Each of these tools has demonstrated moments of brilliance, but they've also exposed the limitations of LLMs when they are put under real-world pressure (a typical: it works well until you show it around). A tool that works beautifully in a demo may struggle once real data and real world scenarios are introduced.

And this is where agile thinking proves invaluable. It keeps us from overcommitting to systems that may later prove unworkable, and gives us the space to adjust as we go.

Will an AI Based Second Brain be the Answer for the Information Gluttony ?

So, what if building an AI based second brain adds another layer of complexity instead of reducing it? Will it be sustainable from an operational / support perspective?

After all, creating an AI-based knowledge system doesn't just solve the original overload; it introduces a new entity that also needs managing, validating, and updating. And if that system starts to convincingly hallucinate, it will create misleading results.

Agile, incremental delivery is not just a good practice, it is essential in AI projects. If we start small and build in sprints, we allow ourselves permission to pivot quickly if things go off track. And in AI, they often do.

What's Next?

In my next post, I'll dive into my experiences in dealing with AI hallucinations, and will try to explain why they happen, how to detect them, and where multi-agent workflows and RAG might help (or complicate) the picture.

If you're exploring how to bridge the gap between experimental AI and sustainable solutions, get in touch and share your experiences.

References:

Previous Article: [In the Age of Information Gluttony](#)

Chris Lettieri's Medium Article: [Self-Organising Second Brain: How I Manage Information Overload](#)

#AI #CrewAI #AgileMethodology #DigitalTransformation #RAG #SecondBrain #LLMs

Definitions

Agile Methodology

A way of managing projects and building products in small, quick cycles called “sprints.” Each sprint delivers a workable piece of the project and incorporates feedback before moving on, reducing wasted effort and allowing teams to adapt to changing requirements.

AI (Artificial Intelligence)

A branch of computer science focused on creating machines and software that can perform tasks that typically require human intelligence, such as understanding natural language, learning from data, and making decisions.

CrewAI

A platform or framework you can use to build AI “agents” that collaborate like a team, each focusing on a different part of the process (for example, drafting text or checking facts).

Hallucinations

When an AI system, particularly a language model, confidently provides an incorrect or fabricated answer. It appears “certain” but is actually mistaken.

LLM (Large Language Model)

A type of AI trained on huge amounts of text. LLMs can understand and generate natural-sounding sentences and paragraphs. Popular examples include GPT-style models.

Second Brain

A metaphor for a digital system or tool that stores, organises, and retrieves information, acting like an external extension of your own memory and knowledge.

Multi-Agent Workflow

A setup in which multiple AI “agents” (or software components) collaborate to complete a task. For example, one agent might write a draft and another agent might check the draft’s accuracy or style.

Procedural Detection of Hallucinations

A method or process to systematically spot AI errors or hallucinations—reducing reliance on a human having to manually catch every mistake.

RAG (Retrieval Augmented Generation)

A technique where an AI model looks up real information from a database or set of documents before generating its answer, making the response (ideally) more accurate and grounded in facts.

Sustainable from an Operational / Delivery Perspective

The ability to continue using a particular AI method, such as RAG, in the long term without it becoming too time-consuming, expensive, or complicated to maintain.

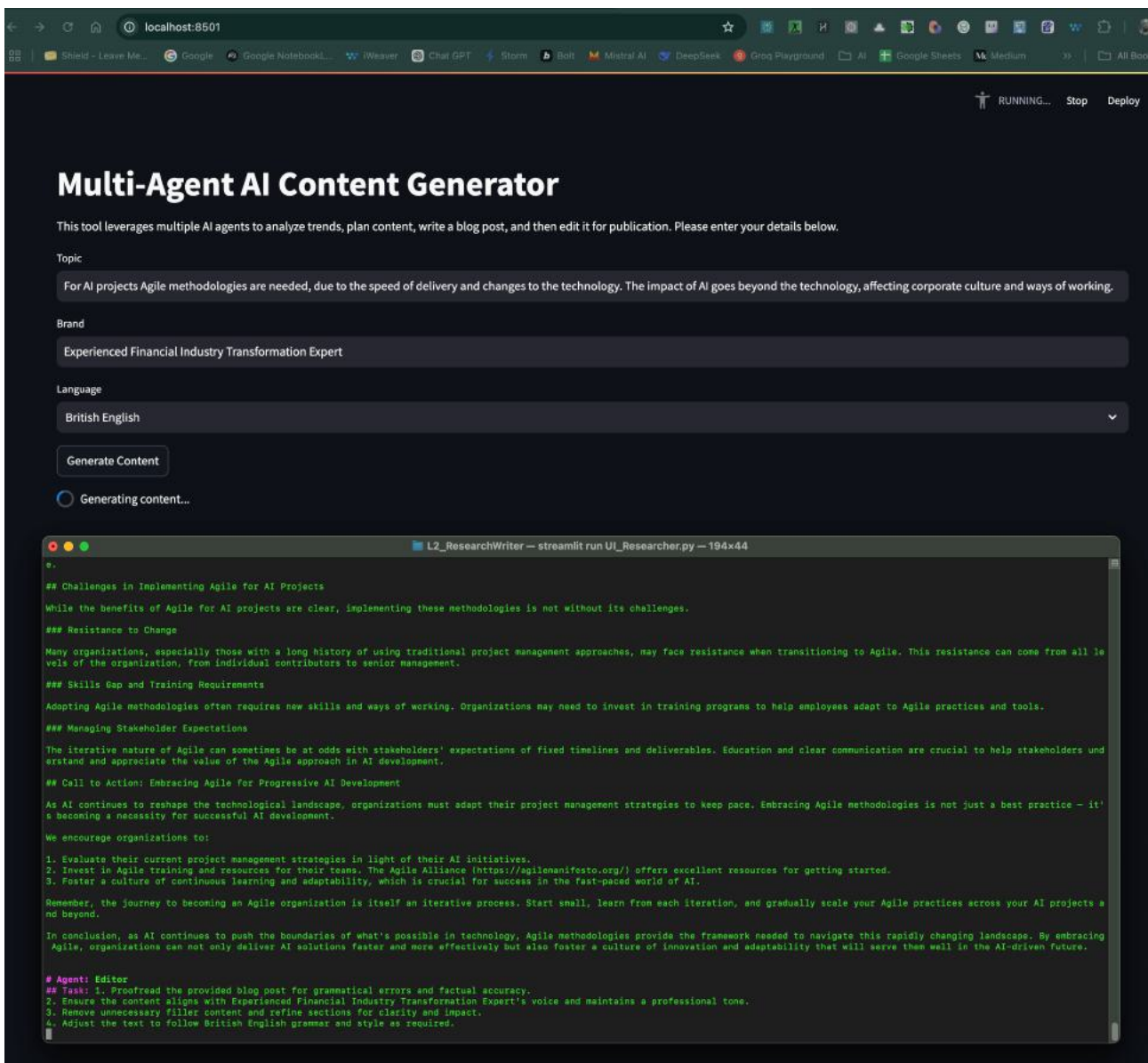
Workflow Design

The process of planning how tasks, tools, and people (or AI agents) interact so that work is done in a logical, efficient sequence. This is crucial in multi-agent AI setups to prevent confusion and errors.

Experimentation Examples

See the screenshots below on how I ask my local LLM to generate content from a phrase or idea.

This article was not generated by this tool.



The screenshot shows a web browser at localhost:8501 displaying a web application titled "Multi-Agent AI Content Generator". The application has a dark theme and a top navigation bar with "RUNNING...", "Stop", and "Deploy" buttons. The main content area contains a form with the following fields:

- Topic:** For AI projects Agile methodologies are needed, due to the speed of delivery and changes to the technology. The impact of AI goes beyond the technology, affecting corporate culture and ways of working.
- Brand:** Experienced Financial Industry Transformation Expert
- Language:** British English

A "Generate Content" button is visible below the form. Below the form, a status indicator shows "Generating content...".

Below the form, a terminal window titled "L2_ResearchWriter - streamlit run UI_Researcher.py - 194x44" displays the following content:

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o.
## Challenges in Implementing Agile for AI Projects
While the benefits of Agile for AI projects are clear, implementing these methodologies is not without its challenges.
### Resistance to Change
Many organizations, especially those with a long history of using traditional project management approaches, may face resistance when transitioning to Agile. This resistance can come from all levels of the organization, from individual contributors to senior management.
### Skills Gap and Training Requirements
Adopting Agile methodologies often requires new skills and ways of working. Organizations may need to invest in training programs to help employees adapt to Agile practices and tools.
### Managing Stakeholder Expectations
The iterative nature of Agile can sometimes be at odds with stakeholders' expectations of fixed timelines and deliverables. Education and clear communication are crucial to help stakeholders understand and appreciate the value of the Agile approach in AI development.
## Call to Action: Embracing Agile for Progressive AI Development
As AI continues to reshape the technological landscape, organizations must adapt their project management strategies to keep pace. Embracing Agile methodologies is not just a best practice - it's becoming a necessity for successful AI development.
We encourage organizations to:
1. Evaluate their current project management strategies in light of their AI initiatives.
2. Invest in Agile training and resources for their teams. The Agile Alliance (https://agilemanifesto.org/) offers excellent resources for getting started.
3. Foster a culture of continuous learning and adaptability, which is crucial for success in the fast-paced world of AI.
Remember, the journey to becoming an Agile organization is itself an iterative process. Start small, learn from each iteration, and gradually scale your Agile practices across your AI projects as you go beyond.
In conclusion, as AI continues to push the boundaries of what's possible in technology, Agile methodologies provide the framework needed to navigate this rapidly changing landscape. By embracing Agile, organizations can not only deliver AI solutions faster and more effectively but also foster a culture of innovation and adaptability that will serve them well in the AI-driven future.
# Agent: Editor
# Task: 1. Proofread the provided blog post for grammatical errors and factual accuracy.
2. Ensure the content aligns with Experienced Financial Industry Transformation Expert's voice and maintains a professional tone.
3. Remove unnecessary filler content and refine sections for clarity and impact.
4. Adjust the text to follow British English grammar and style as required.
```