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

Author: Wenceslao Alfageme **Published**: 26 March 2025

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 Al-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 Python 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.

Al product development is no different. If anything, it demands even more flexibility. Generative Al 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 CrewAl

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 proved unworkable, and gives us the space to adjust as we go.

Will an Al 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.

Al (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.

CrewAl

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

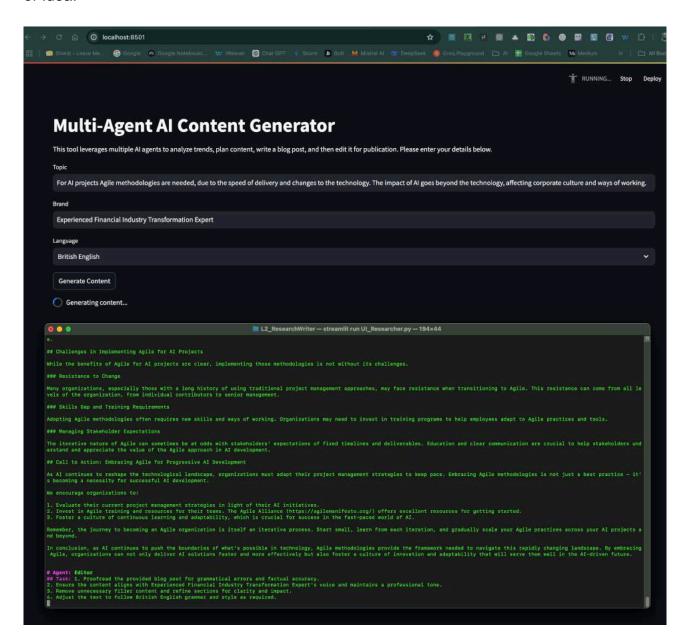
The ability to continue using a particular AI method, such as RAG, in the long term without it becoming too time-consuming, expensive, or complicated to maintain.

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 bellow on how I ask my local LLM to generate content from a phrase or idea.



Disclaimer and Disclosure

Third-party Content and AI Assistance: This article references tools and software that are publicly available and proprietary to their respective creators. The author does not claim ownership or affiliation with these third-party products. This article was written by the author with assistance from Generative AI Language Models.

Transparency Notice: While every effort has been made to ensure accuracy, readers should verify information independently and consult official sources or documentation for the mentioned tools and software. The use of AI in the writing process is disclosed in the interest of transparency, but all opinions and analyses are the author's own unless otherwise stated.