UTILISING AI AS AN API PRODUCT MANAGER

Using Product Led API Design

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AI MUSIC
My Introduction

- I make electronic music (as XAUF)

- This was my first AI augmented creation.

TODAY

What I will be talking about

- Not about making music.

- Product, Context, APIs and AI.

- Not just slides.

SPECIFICATION LED

What is it?

- Creating specifications for solutions before building them.

- Sometimes focused on the Engineering team creating these specifications.

- Usually centre on 'Requirements' and if Product is involved 'PRDs'.

API FIRST
What is it?

- Designing the API before building the backend (sounds simple!).

- Usually focused on Engineering 'designing' the Open API Spec.

PRODUCT LED / PRODUCT FIRST
Being led by Product Managers

- What is the landscape of the Product?

- Why is it needed & what job does it need to do?

- Who needs it?

- How do you prioritise what a team should focus on when you don't have enough data?

- What is your vision for the product?

- What inputs make you change your mind about what should be done?

- Always evolving.

PRODUCT LED API DESIGN
What is it?

- Acknowledging APIs are Products and need Product Managers.

- Applying Product and Design Thinking to APIs.

- Doing this first!

PRODUCT LED API DESIGN WITH AI

What is it?

- Using Artificial Intelligence to help Product Managers design APIs (please join "Product Led AI" on LinkedIn).

- A common tool for this is a natural language to Open API Specification UI.

  - But generally the Product context is lost, as the generation of the OAS is treated as a one off.

- Another common use of AI that can be helpful for designing APIs is synthetic data and mocking APIs; you don't need a special tool, just use any LLM (or SLM…).

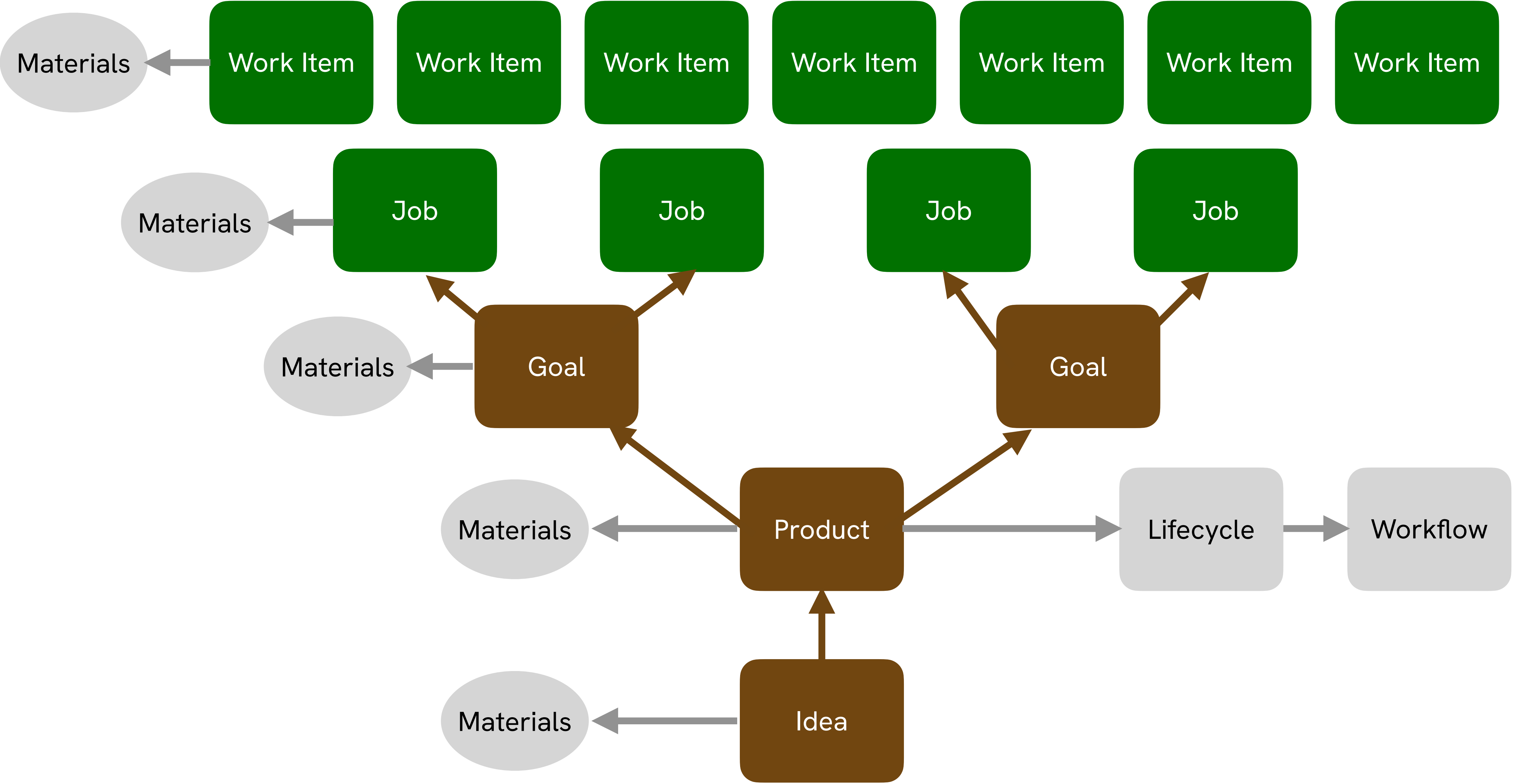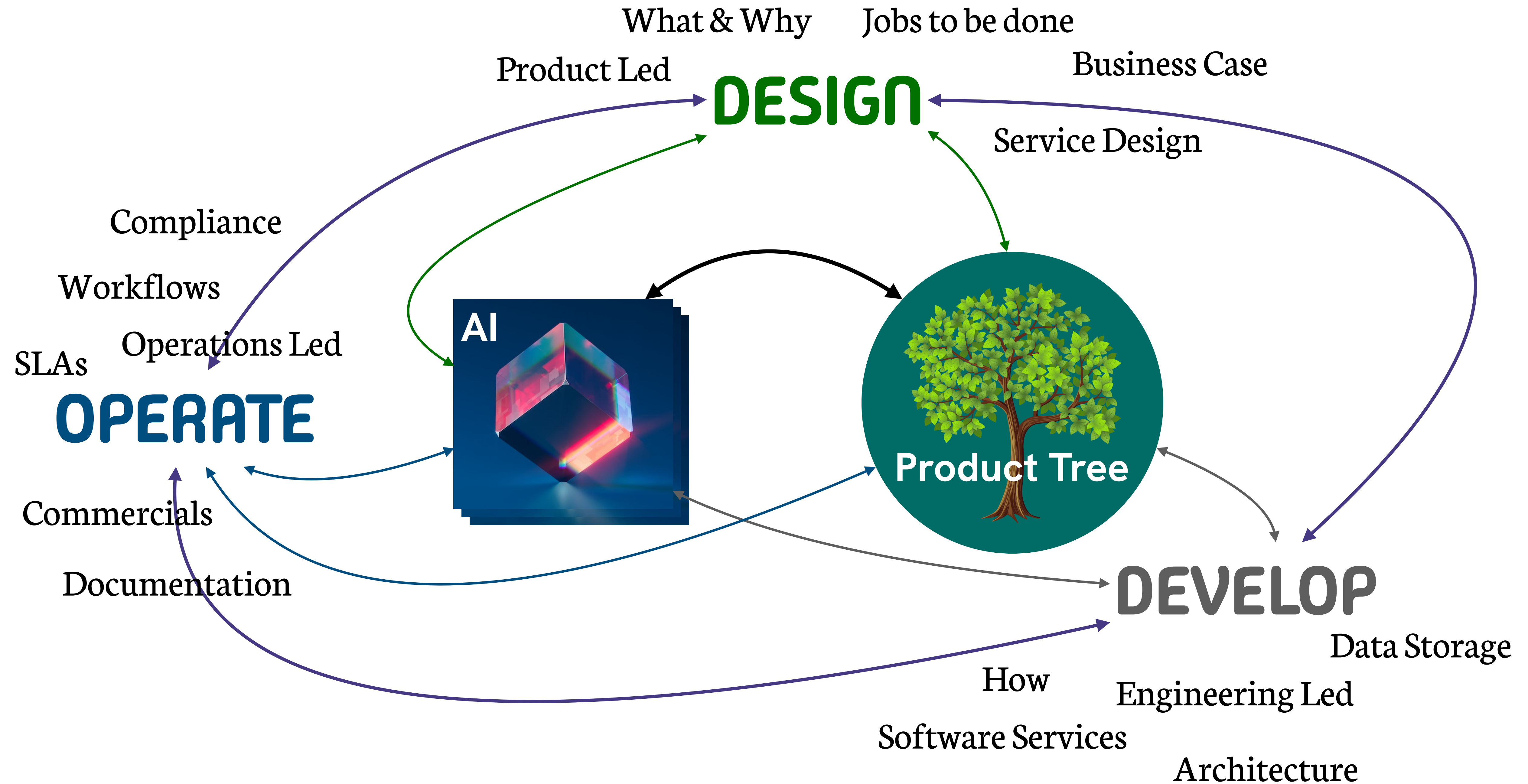 - This needs you to tell AI all about the context of the API.

THE PRODUCT TREE

A Product Led and evolving context for humans and AI

- A standardised XML file.

- Nodes: Product > Goal > Job > Work Item.

- Ideation is the 'seed' of the tree (although ideas can be promoted to any node; no metaphor is perfect!)

- Materials (URLs) can be attached to any node e.g. Personas to a Product, Figma designs to a Work Item.

- Allows AI to help you without you having to describe the context (acts as a knowledge graph).

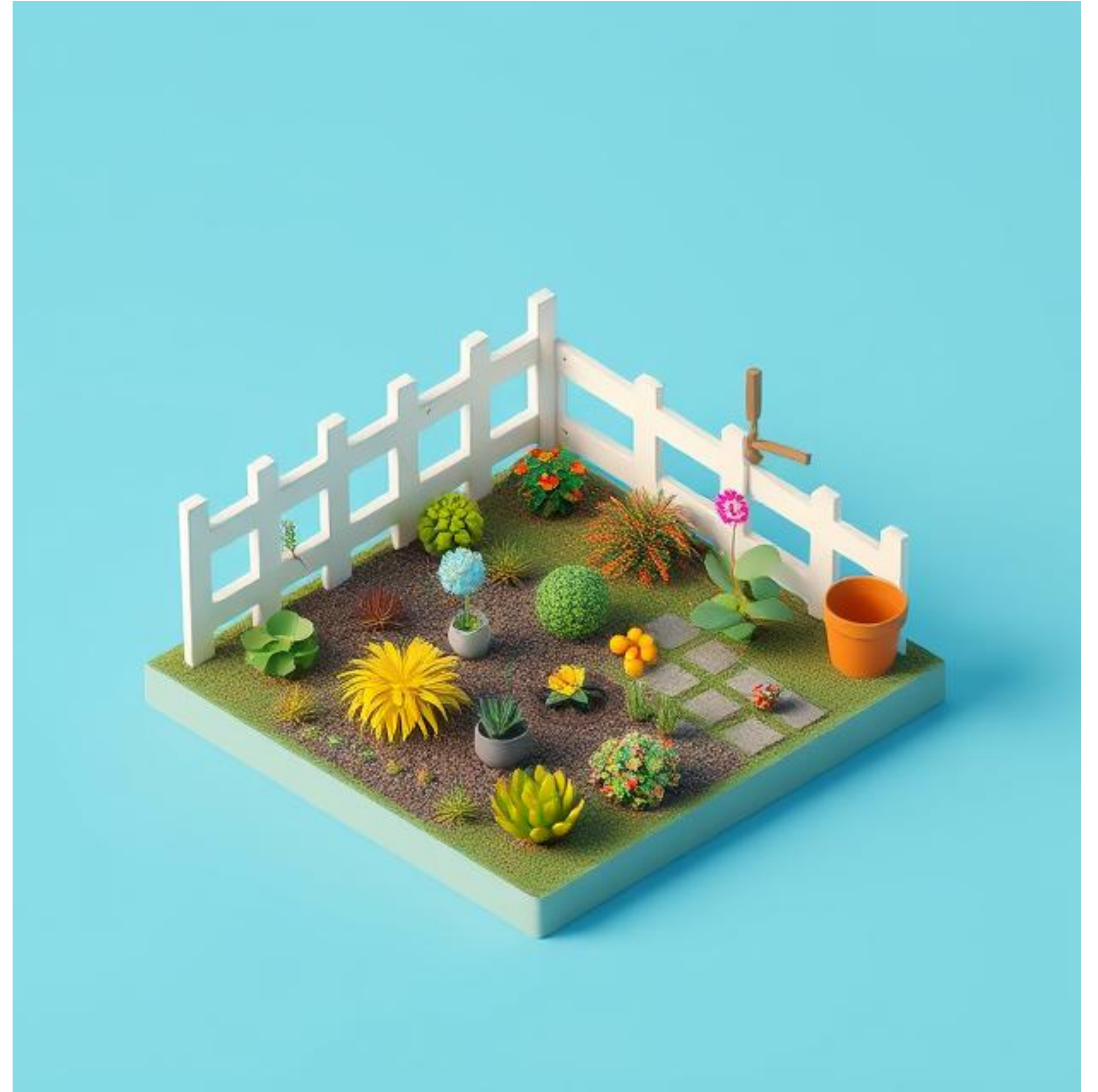- Allows teams to work towards the same thing, moving in the same direction.

THE PRODUCT TREE

What & Why   Jobs to be done

Product Led   **DESIGN**   Business Case

Service Design

Compliance

Workflows

SLAs   Operations Led

OPERATE   AI   **Product Tree**

Commercials

Documentation   **DEVELOP**

Data Storage

How

Engineering Led

Software Services

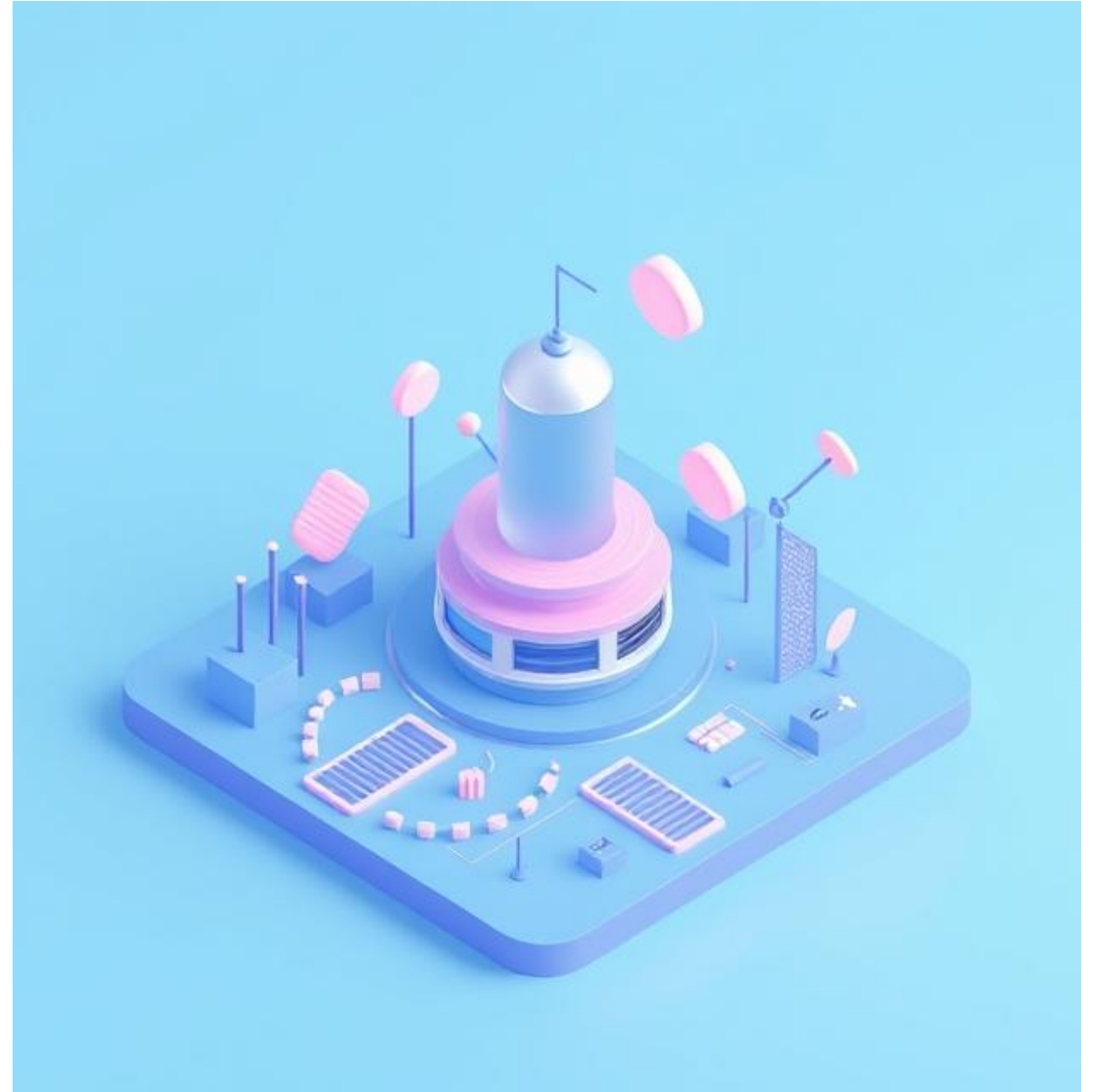Architecture

PRACTICAL EXAMPLES

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FIRST THINGS FIRST

- Getting some product tree goodness from Jira
- Doing some gardening

EXAMPLE 1

Design an API

EXAMPLE 2

Design an MCP server

ETC...

You can give the Product Tree XML to the AI of your choice, or get your developers to put it in a context folder in their projects and let their coding AI to take a look at it when needed.

In conclusion

What can you, as an API Product Manager, take away from this?

- You can use the tools for free!

- The Product Tree tools are open sourced!

- That API Design should be Product Led.

- That AI can augment Product Led API Design.

- Actually, creating something like these tools, using AI to help and within them, has helped me learn all about AI; the good and the bad, and helps me make decisions and communicate about AI as a Product Manager at LSEG.

- I would suggest all Product Managers do something similar!

QUESTIONS?

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THE INMATES
ARE RUNNING
THE ASYLUM

TAMING TECH MADNESS:
SOLUTIONS FOR SANITY

ALAN COOPER

UNHYPED

From Hype to Hard ROI
in the Age of AI

Stuart Winter–Tear

REFERENCES & FURTHER READING

Specification-Led & API-First

- Spec-Driven Development: The Key to Scalable AI Agents — The New Stack (2025)

- Spec-Driven AI Development — Ran Aroussi / Automaze (2025)

- Understanding the API-First Approach to Building Products — Swagger (2024)

- API-First vs Code-First: A Comparative Study — J. Larsson et al. (2021)

Product-Led APIs

- The API Product Mindset — Google Apigee eBook (2019)

- What API Product Managers Need — Deepa Goyal, InfoQ (2023)

- Why Winning with Technology Requires Being Product-Led — Spencer Stuart (2025)

AI Needs Context

- A Survey of Context Engineering for Large Language Models — Mei et al. (arXiv, 2025)

- Contextual Retrieval in AI Systems — Anthropic (2024)

- Seizing the Agentic AI Advantage — McKinsey (2025)

AI in API Design & Development

- Spec-Driven Development with AI: Open Source Toolkit — GitHub Blog (2025)

- Design-First Approach to API Development — InfoQ (2023)

- The Easy Button for Context-Rich AI Agents — Snowflake Blog (2025)