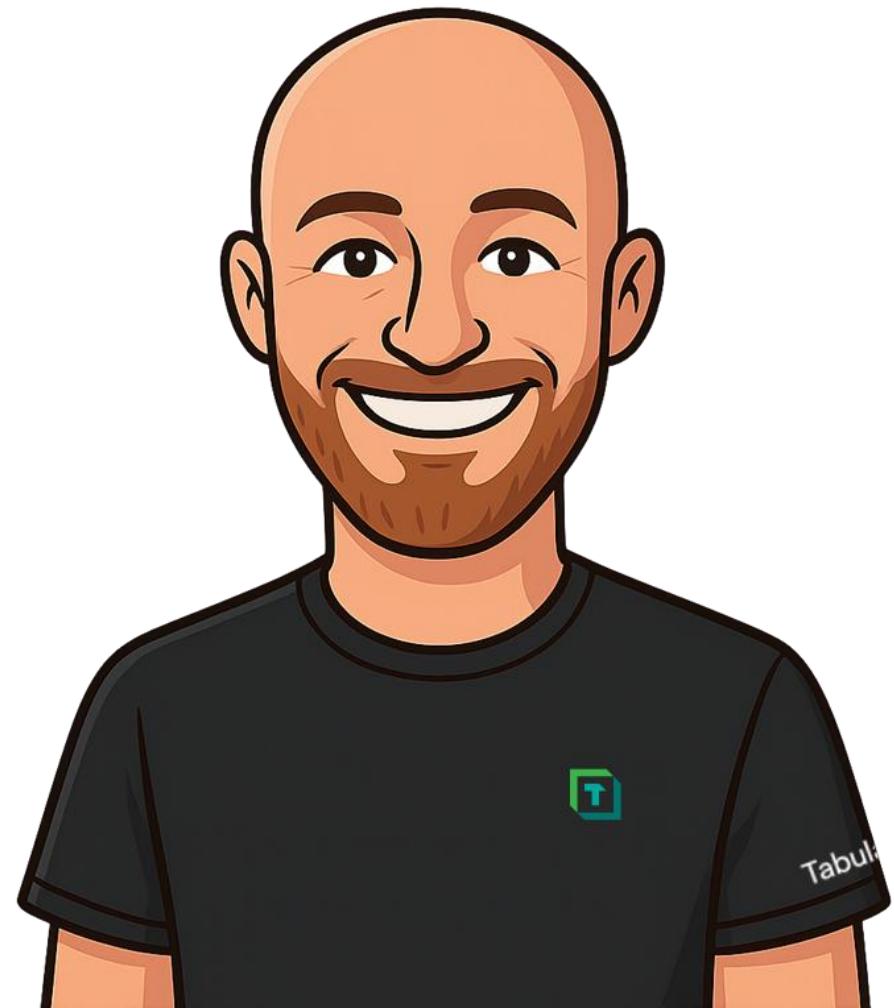


# VIBE CODING A POWER BI EMBEDDED PORTAL FROM ZERO TO HERO IN 60



# WHO AM I?



## Peer Grønnerup

*Technical Architect & Community Advocate at Tabular Editor*

*Software-developer roots and proudly “strategically lazy”  
I automate so I don’t have to repeat myself!  
15+ years building BI and Data Platform solutions*

 <https://www.linkedin.com/in/peergroennerup/>

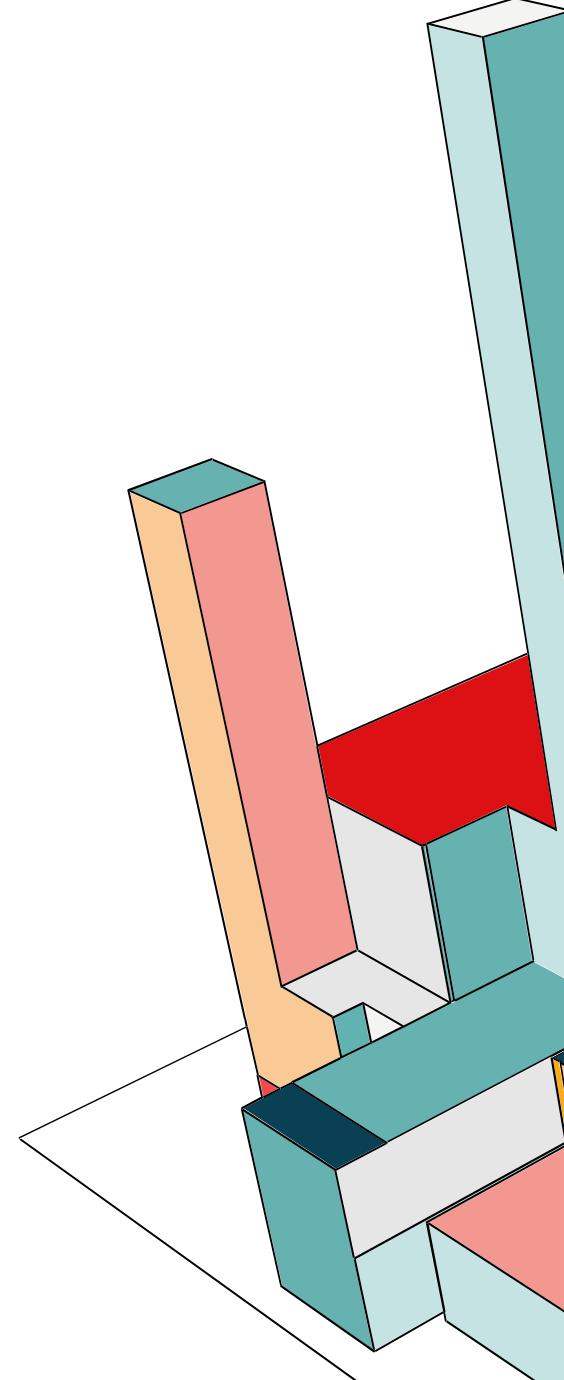
 <https://peerinsights.hashnode.dev>

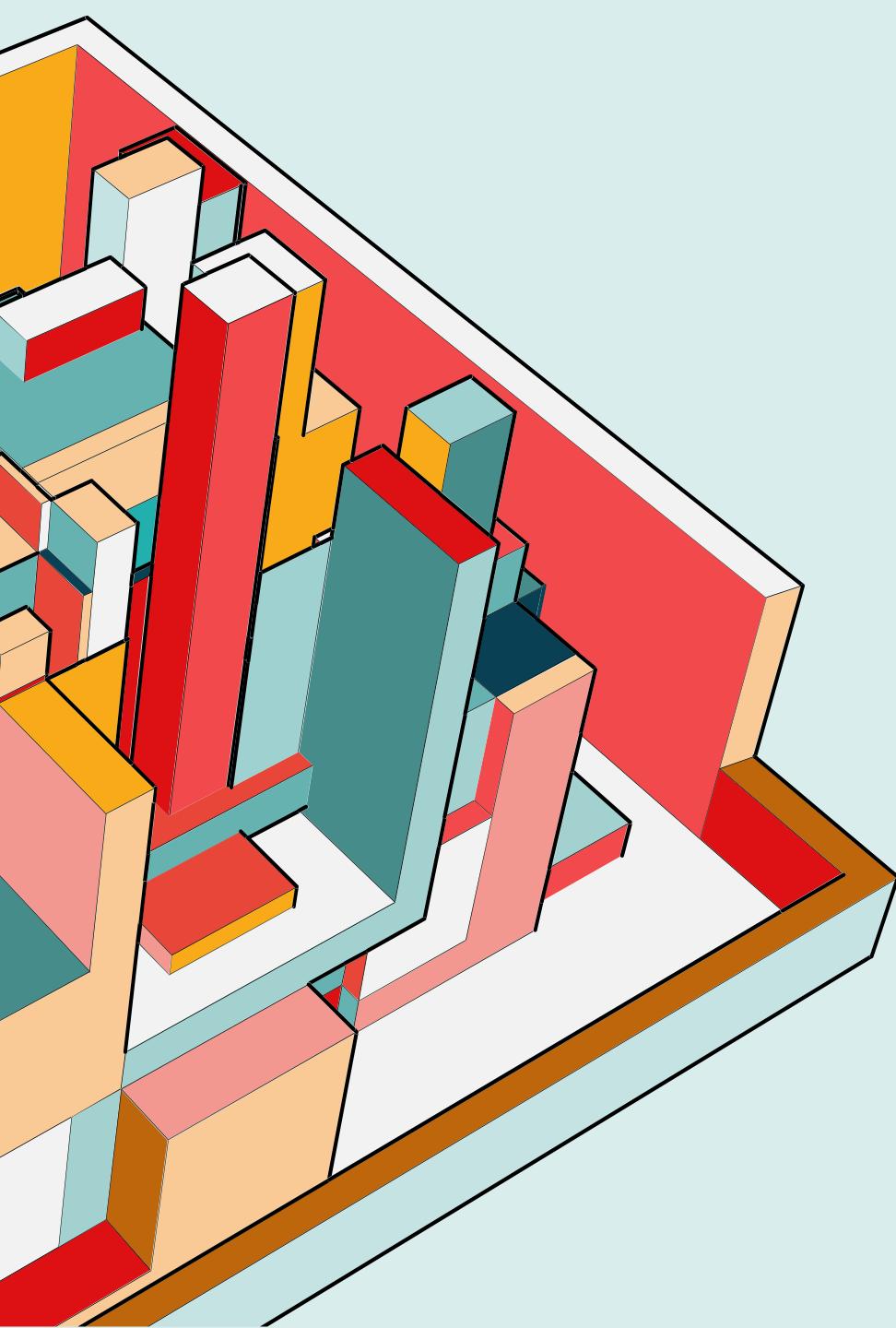
 <https://github.com/gronnerup>

 <https://www.tabulareditor.com>

# WHERE ARE WE GOING TONIGHT?

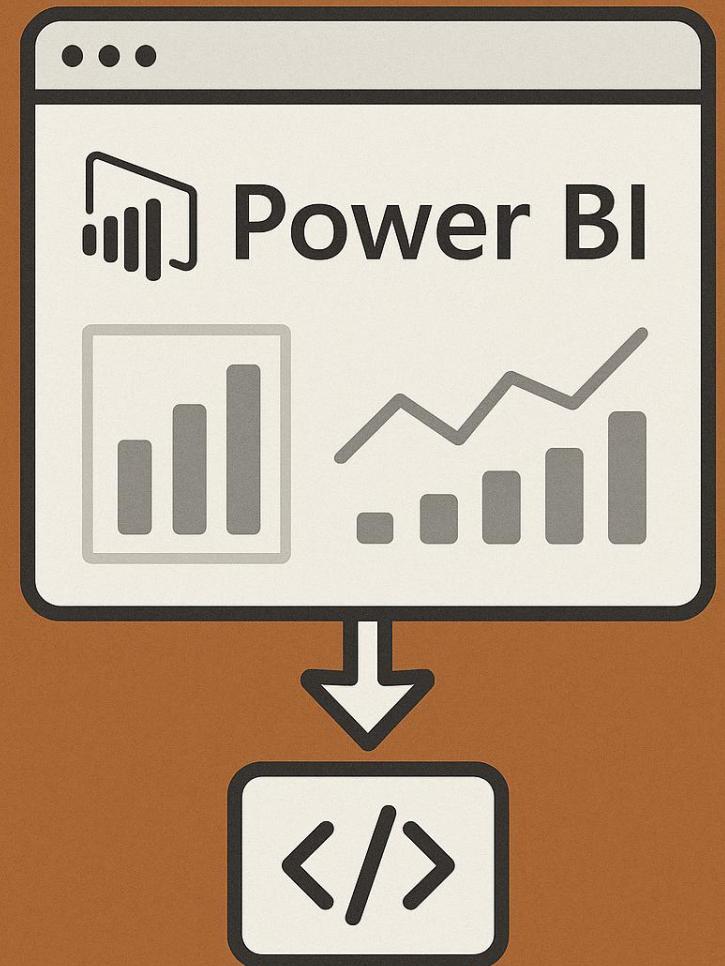
- Introduction
  - Power BI Embedded
  - Vibe coding
- Live vibe coding an MVP of a Power BI Embedded Portal
  - The idea and goal for today
  - Setup & prerequisites
- Wrap-up + Q&A





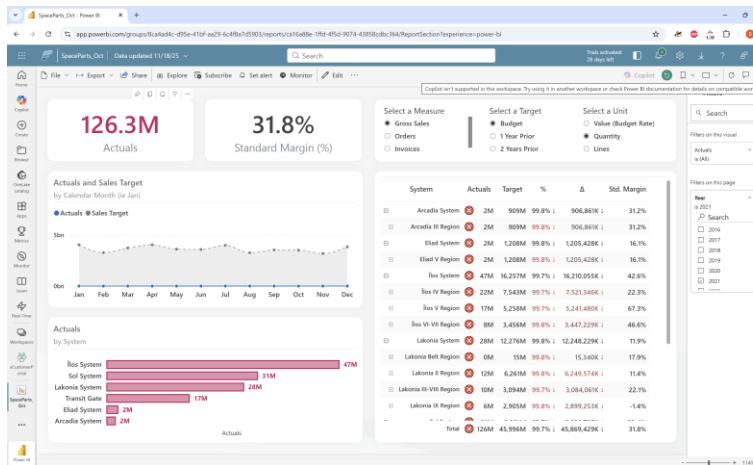
# INTRODUCTION

# POWER BI EMBEDDED

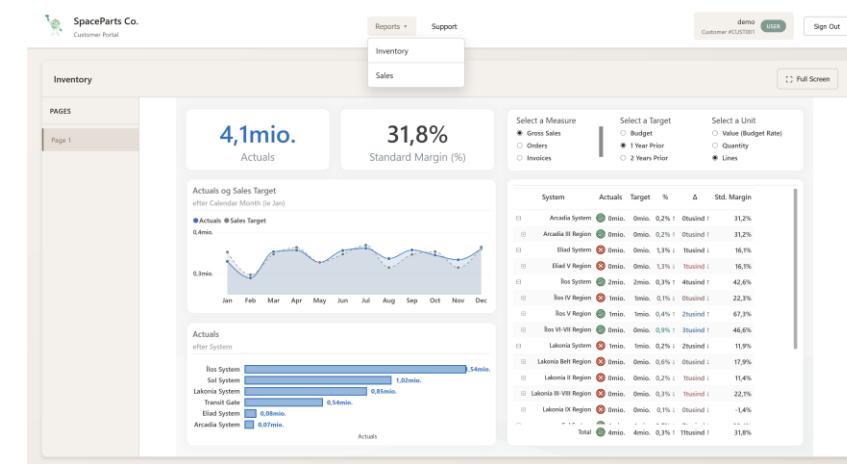


# WHAT IS POWER BI EMBEDDED?

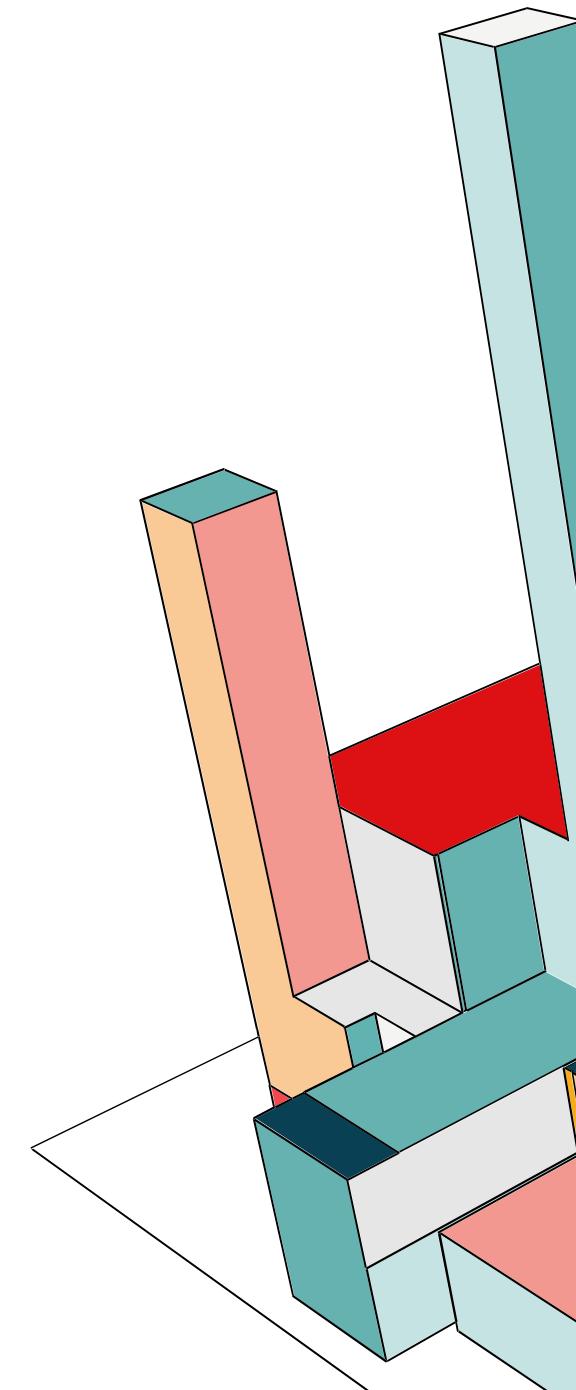
- It's a way to embed Power BI reports etc. into your applications
- Supports both internal and external audience
- Control and white-label the experience fully



Default experience



Your experience



# POWER BI EMBEDDED OPTIONS

## 2 embedding options

- External
  - Requires a capacity
  - Pro or PPU for development
- Internal
  - Require individual licenses

| Feature          | External users       | Internal users                         |
|------------------|----------------------|--|
| Authentication   | App managed          | Microsoft Entra ID                     |
| Licensing        | F, P or A-SKU*       | Pro, PPU, P or +F64 SKU                |
| Primary use case | External facing apps | Internal business apps                 |
| Ownership        | App owns data        | User owns data                         |
| Implementation   | Custom coding        | Secure embed (iframe)<br>Custom coding |

\* No user licenses required

# WHY EMBED?



- Better user adoption
- Seamless UX (branding + layout)
- Control access & navigation
- Can be low-code or no-code
- Cost saving
- Use it internally or externally
  - Intranet
  - Customer portal



# THE CONS OF EMBEDDED ANALYTICS



- Requires a capacity = complex pricing and capacity planning
- More engineering effort
- Operational complexity
  - Multi-tenant design
  - Life-cycle management
  - Authentication
  - Hosting
- Feature parity nuances



# THE CONS OF EMBEDDED ANALYTICS



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# VIBE CODING

Preparing for some groovy coding

# AN INTRODUCTION TO VIBE CODING

- Vibe coding an AI-powered development practice
- It requires no to little technical skills
- It requires no heavy upfront design or planning
- It shifts from writing lines of code to creating products simply by describing ideas in natural language
- Let your energy, ideas and intuition lead the way
- 8-year-old girl codes with Cursor AI:  
<https://youtu.be/o5uvDZ8srHA?si=jE8N3eQ7fTFYKhyr>

← Post



Andrej Karpathy ✅  
@karpathy

There's a new kind of coding I call "vibe coding", where you fully give in to the vibes, embrace exponentials, and forget that the code even exists. It's possible because the LLMs (e.g. Cursor Composer w Sonnet) are getting too good. Also I just talk to Composer with SuperWhisper so I barely even touch the keyboard. I ask for the dumbest things like "decrease the padding on the sidebar by half" because I'm too lazy to find it. I "Accept All" always, I don't read the diffs anymore. When I get error messages I just copy paste them in with no comment, usually that fixes it. The code grows beyond my usual comprehension, I'd have to really read through it for a while. Sometimes the LLMs can't fix a bug so I just work around it or ask for random changes until it goes away. It's not too bad for throwaway weekend projects, but still quite amusing. I'm building a project or webapp, but it's not really coding - I just see stuff, say stuff, run stuff, and copy paste stuff, and it mostly works.

# AN INTRODUCTION TO VIBE CODING

- Vibe coding an AI-powered development practice
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**Pure vibe coding**

VS.

**Responsible AI-assisted  
development**

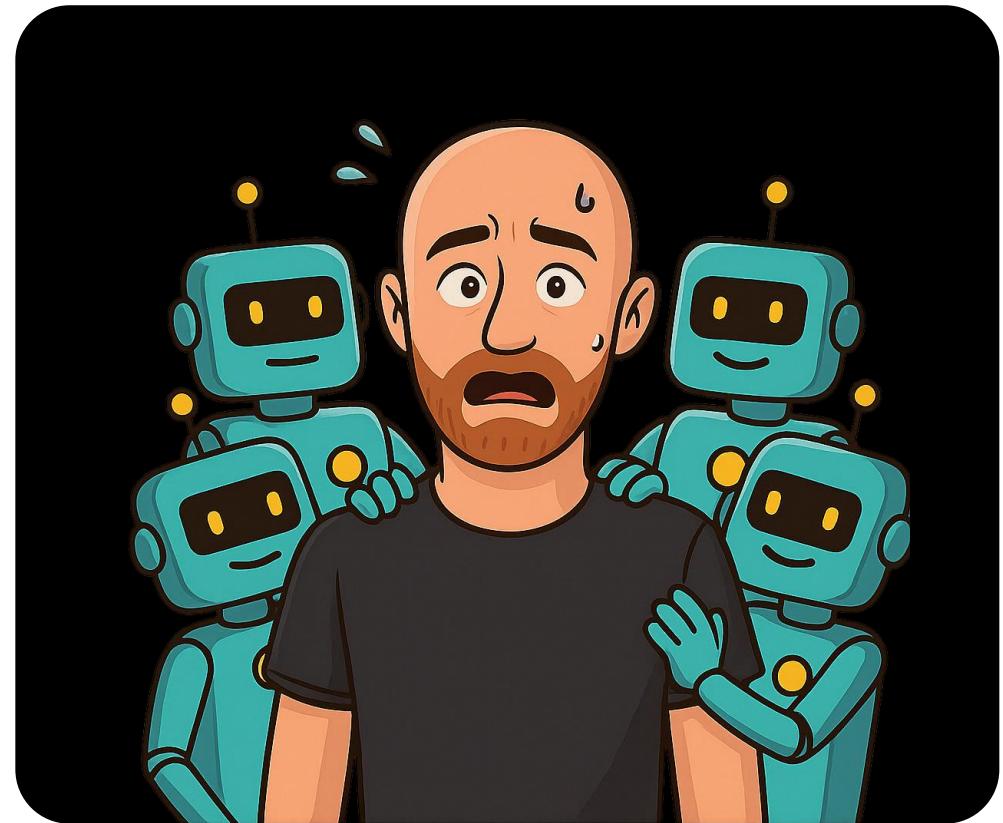
# FEEL THE VIPE - IT'S PURE AND IT'S ALL GOOD

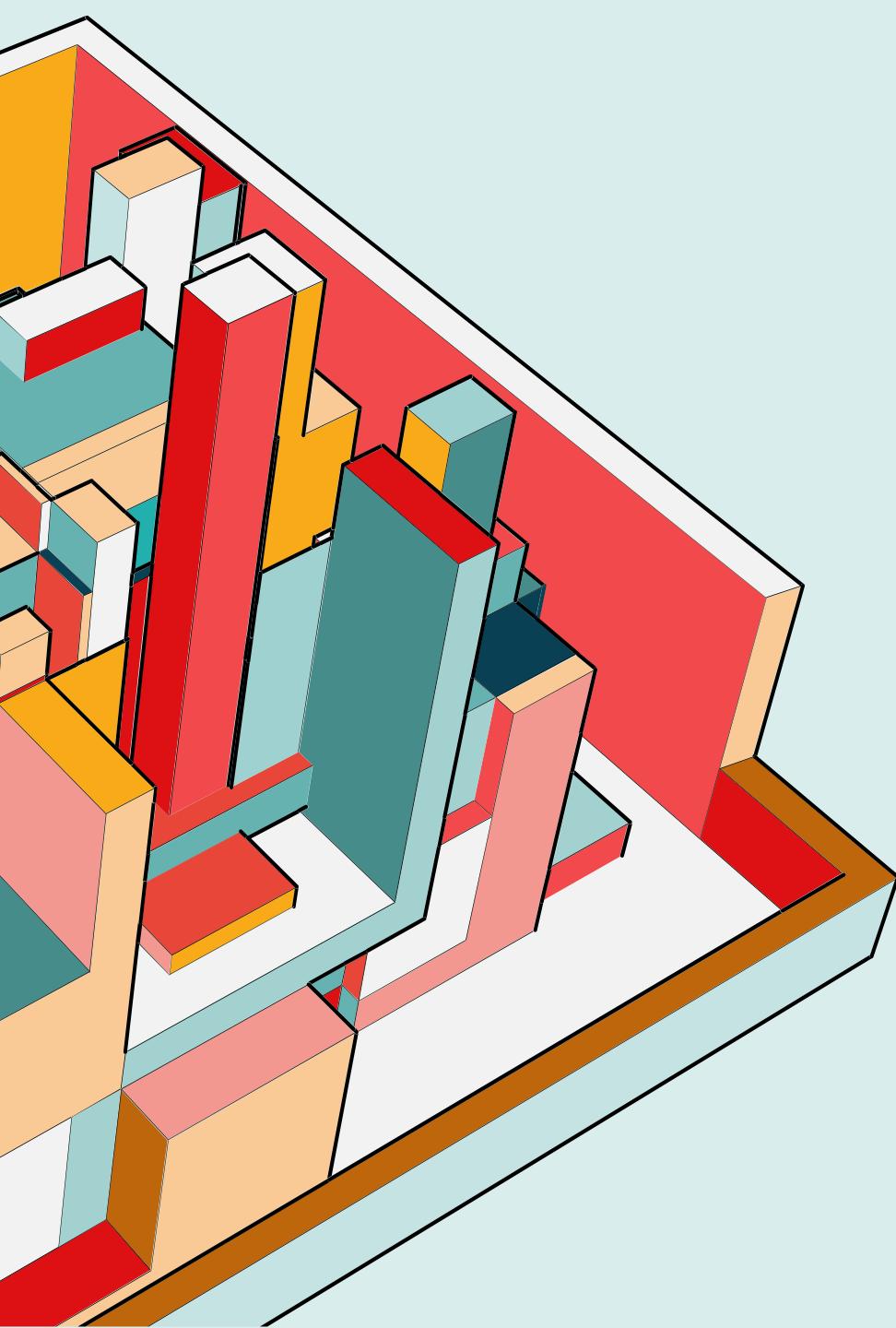
- Speed
- Creativity
- Easy to iterate
- Accessibility
- Fast prototyping



# THE DANGERS OF PURE VIBE CODING

- **Messy code**
- **No long-term structure**
- **Hard to debug**
- **Loss of understanding**
- **Security gaps**

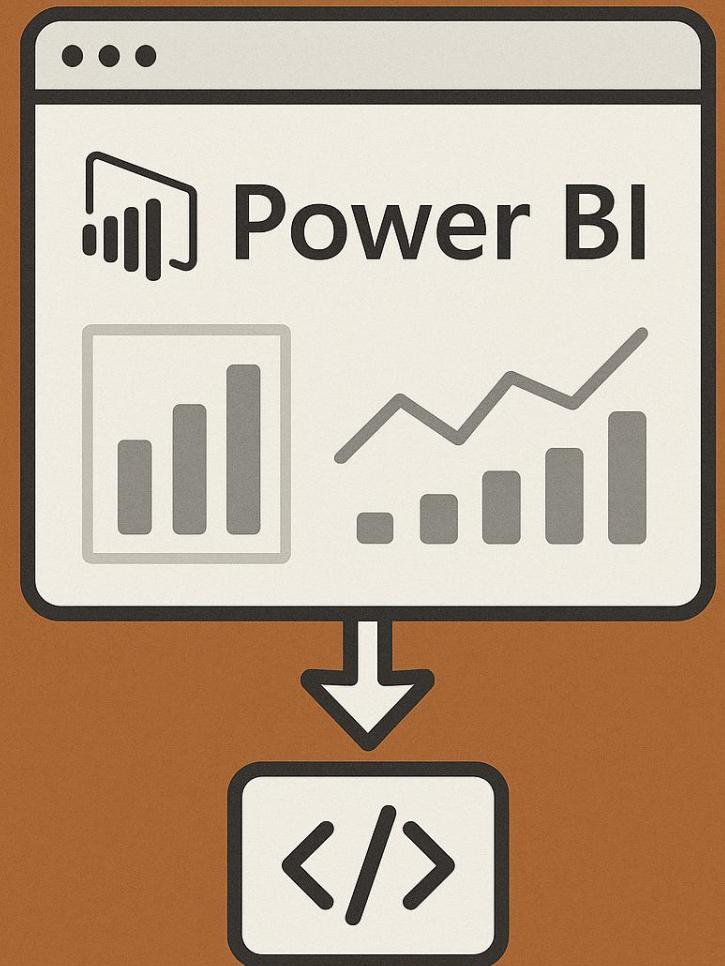




**VIBE CODING...**

# **POWER BI EMBEDDED**

The goal for todays session....



# THE IDEA AND THE GOAL FOR TODAY

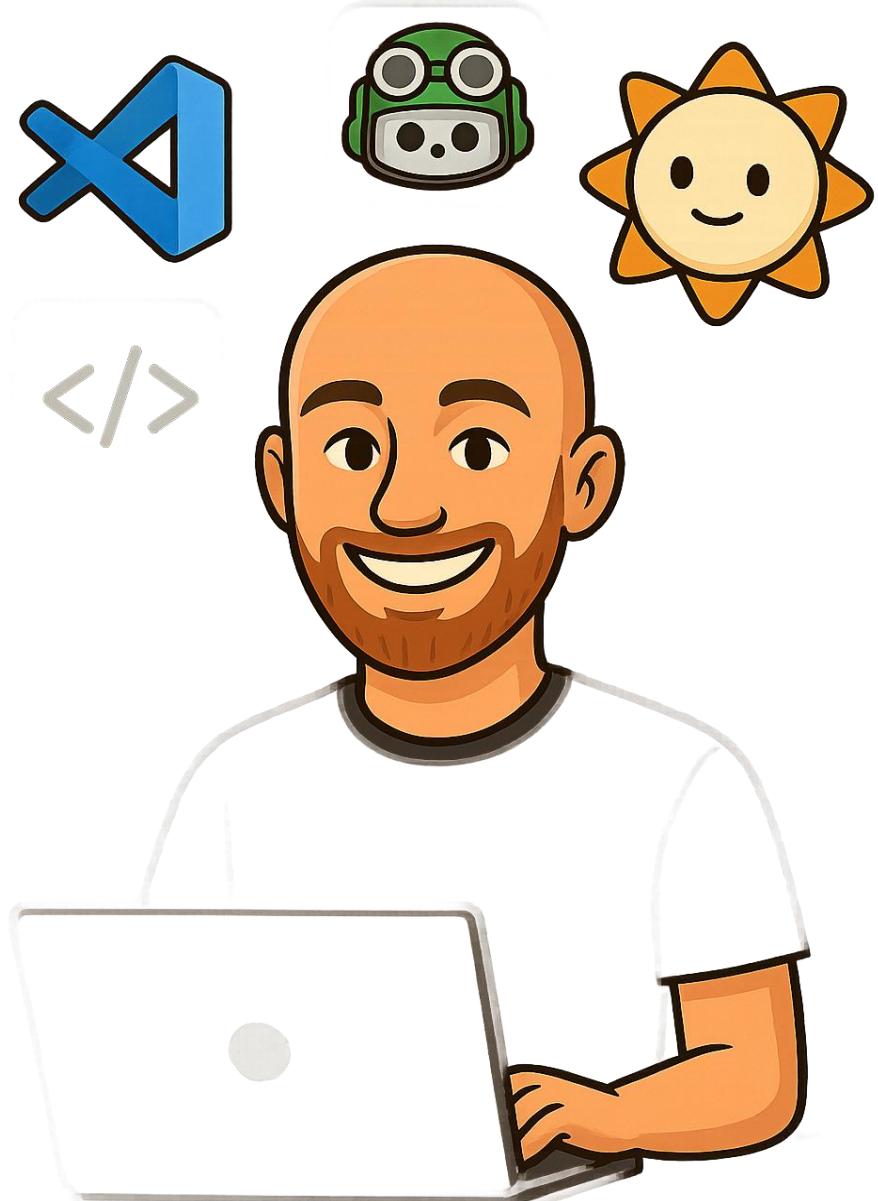
## A Power BI Embedded Portal

- Targeted externals (App owns data)
- Login/authentication
- With information pages
- Support for dynamic RLS
- Add additional UX
  - Fullscreen
  - Page navigation and more...

## The goal

- A fully production ready application
- Deployed and running in Azure





## PREREQUISITES, TOOLING & SETUP

Overview of the foundation for vibe  
coding a Power BI embedded app

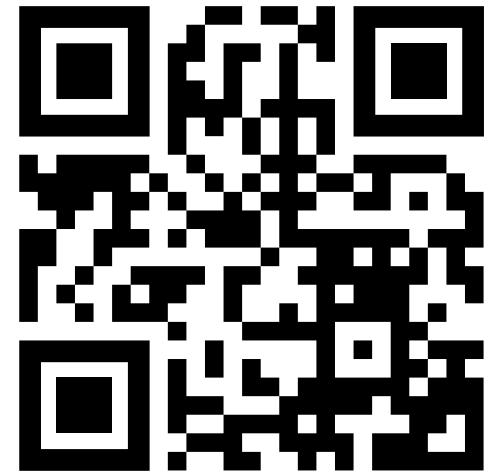
# THE TOOLBOX AND MY PREPARATIONS

## The toolbox

- VS Code
- GitHub Copilot
- Context7 MCP
- Azure App Service
- WhisperTyping
- Spotify

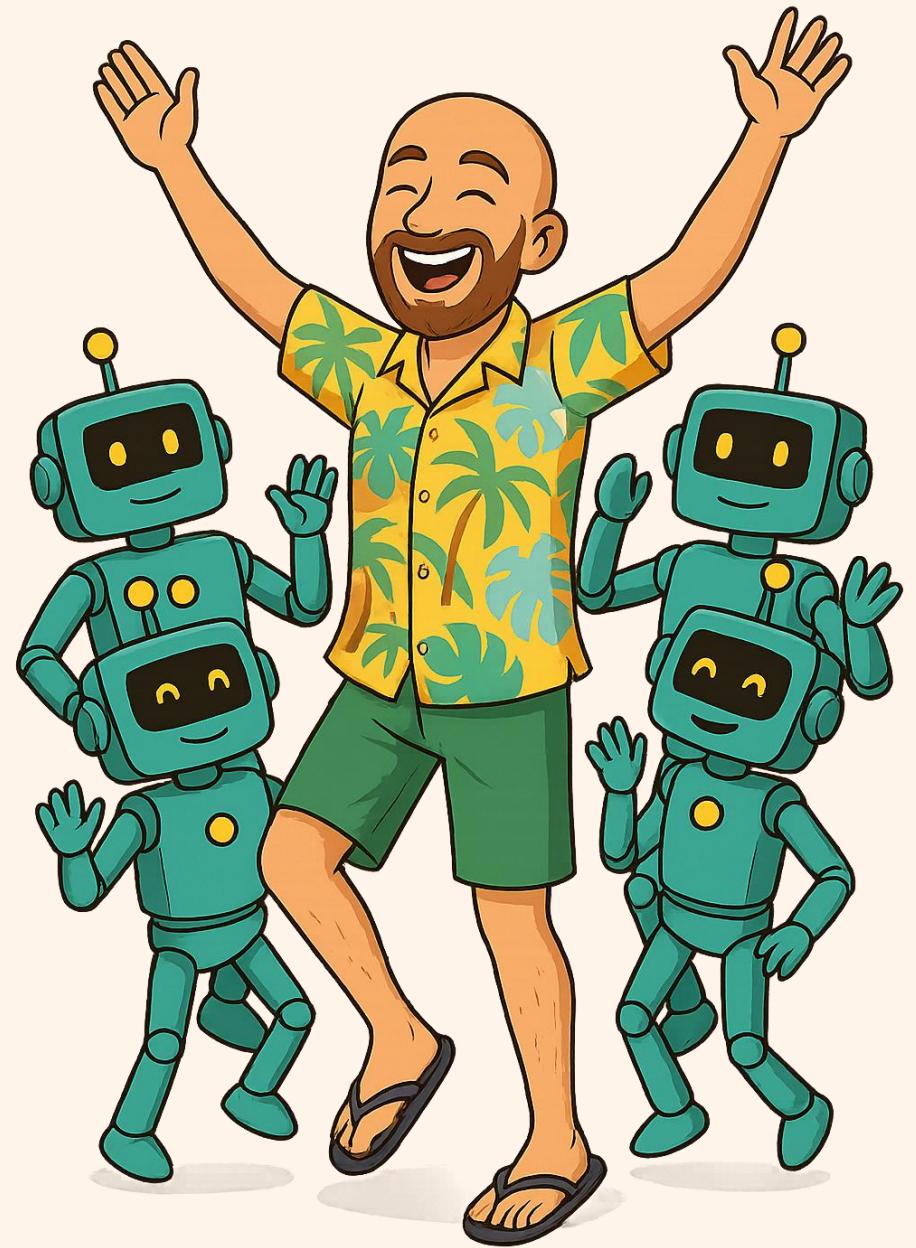
## Pre-requisites for Power BI Embedded

- Power BI Workspaces containing
  - 2 report for embedding
  - A semantic model with no RLS
- Azure
  - Empty resource group created
  - Service Principal created
- GitHub Copilot instructions file



[github.com/gronnerup/VibeCodingPowerBiEmbedded](https://github.com/gronnerup/VibeCodingPowerBiEmbedded)

**LET'S GO FEEL  
THE VIBE!**





## WRAP-UP + Q&A

# FINAL TIPS & TAKEAWAYS

## Conceptualize First

Start with a clear idea of what to build

## Domain knowledge is Power

Knowing relevant frameworks, technologies etc. significantly improves AI-generated results

## Iterate your development

Expect to debug and refine. AI is not a magic wand.

Instruct your agents well

asdfasdfsdf



# MY RECOMMENDED VIBE CODING TOOLS

## **VS Code w/ GitHub CoPilot**

For developers who want AI assistance in their existing IDE.

## **Cursor and/or Windsurf**

VS Code forks. Very similar but with a few differences in the UX.

Best for pro developers who want an AI-first IDE.

## **Lovable**

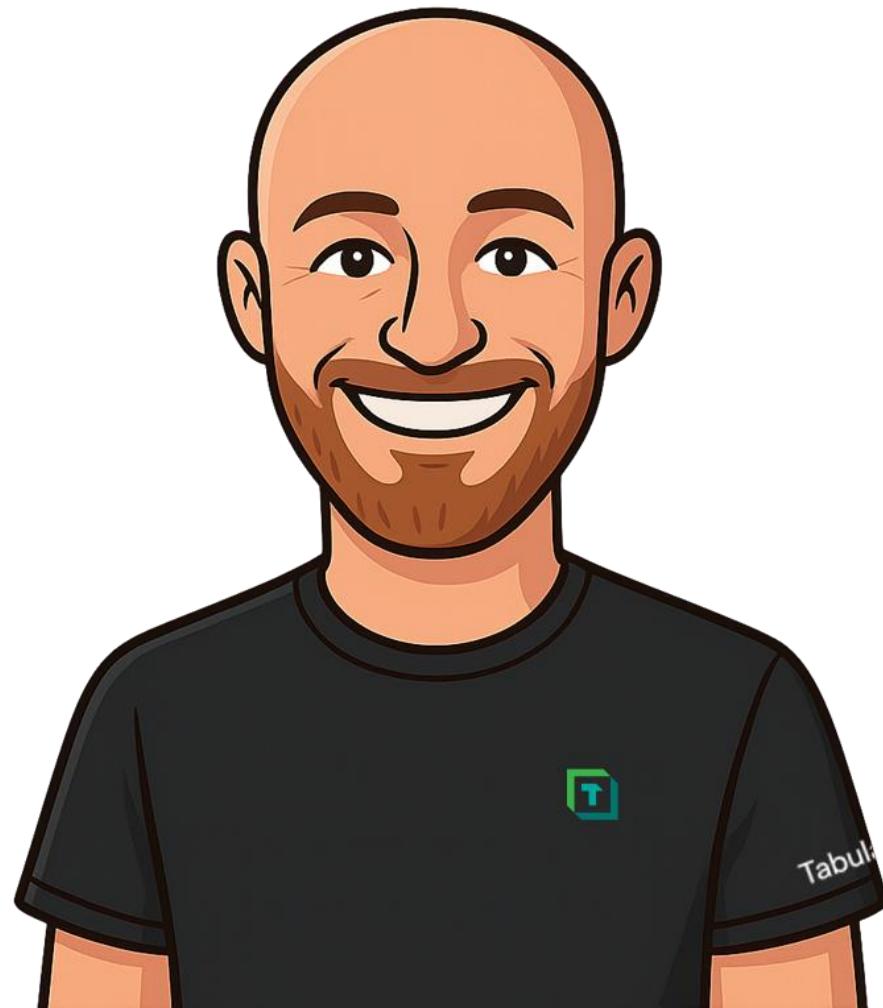
Most user friendly for non-coders and low-coders.

## **Claude code**

Best for experienced developers. Handles complex multi-file projects.



# MY REPO FOR YOU TO GET STARTED



- [!\[\]\(a07aa36d78c53e31e70392f2e6464460\_img.jpg\) https://www.linkedin.com/in/peergroennerup/](https://www.linkedin.com/in/peergroennerup/)
- [!\[\]\(287c4fb1f5e17c57768ce0ff15937137\_img.jpg\) https://peerinsights.hashnode.dev](https://peerinsights.hashnode.dev)
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- [!\[\]\(c2ce9d502fdd552aa2c024496bae0e44\_img.jpg\) https://www.tabulareditor.com](https://www.tabulareditor.com)

# THANK YOU

