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# From 100 applications

To one platform

# nova net

- Senior Consultant @ Novanet AS
- Tech lead / architect
- Various industries



**HELLO**  
**MY NAME IS**

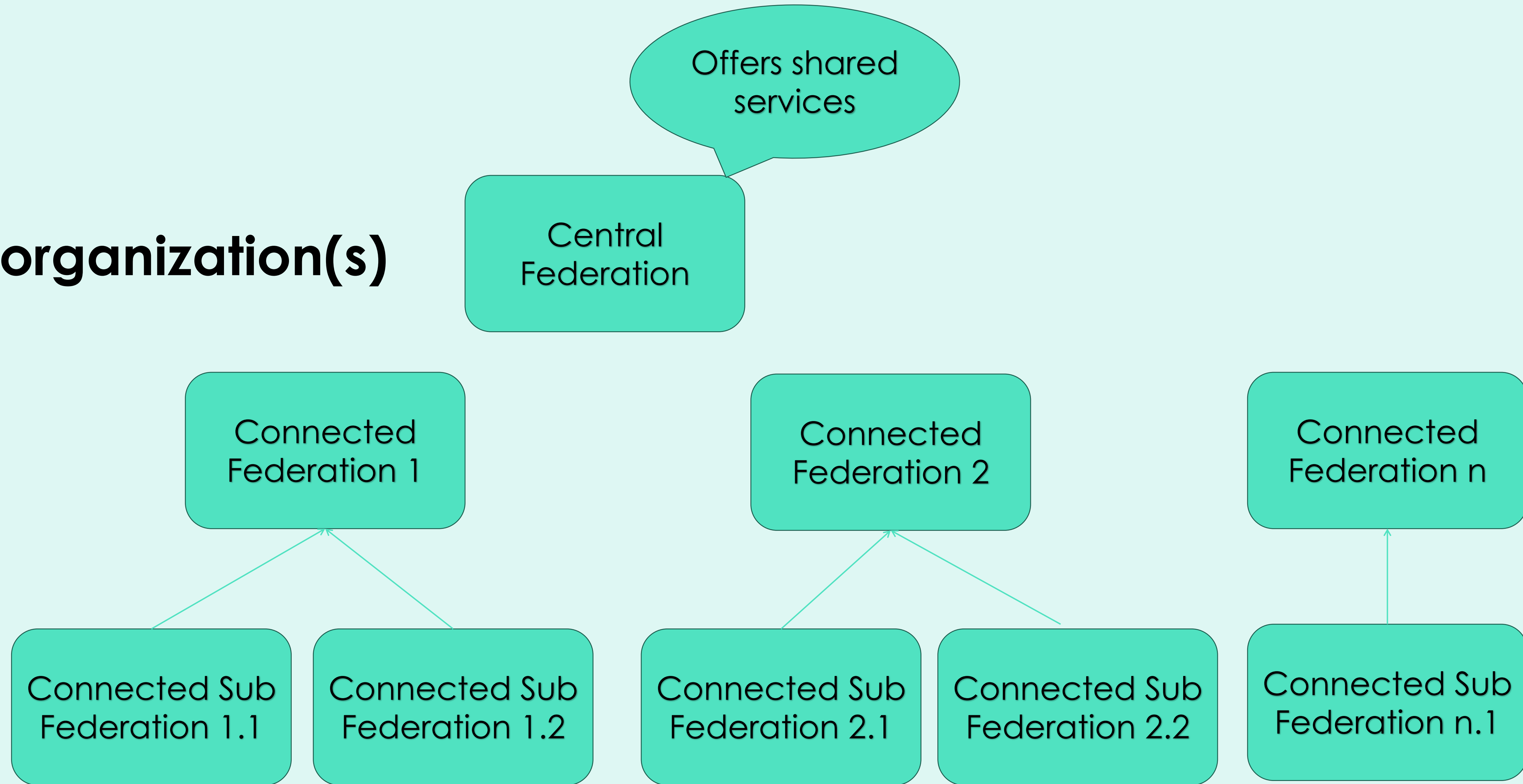
*Leif Larsen*

# Agenda

- How did we end up with 100s of applications and no platform?
- 5 strategies we used to change this
- 3 big challenges faced in the process
- How does the architecture look now?
- A look into our tech stack

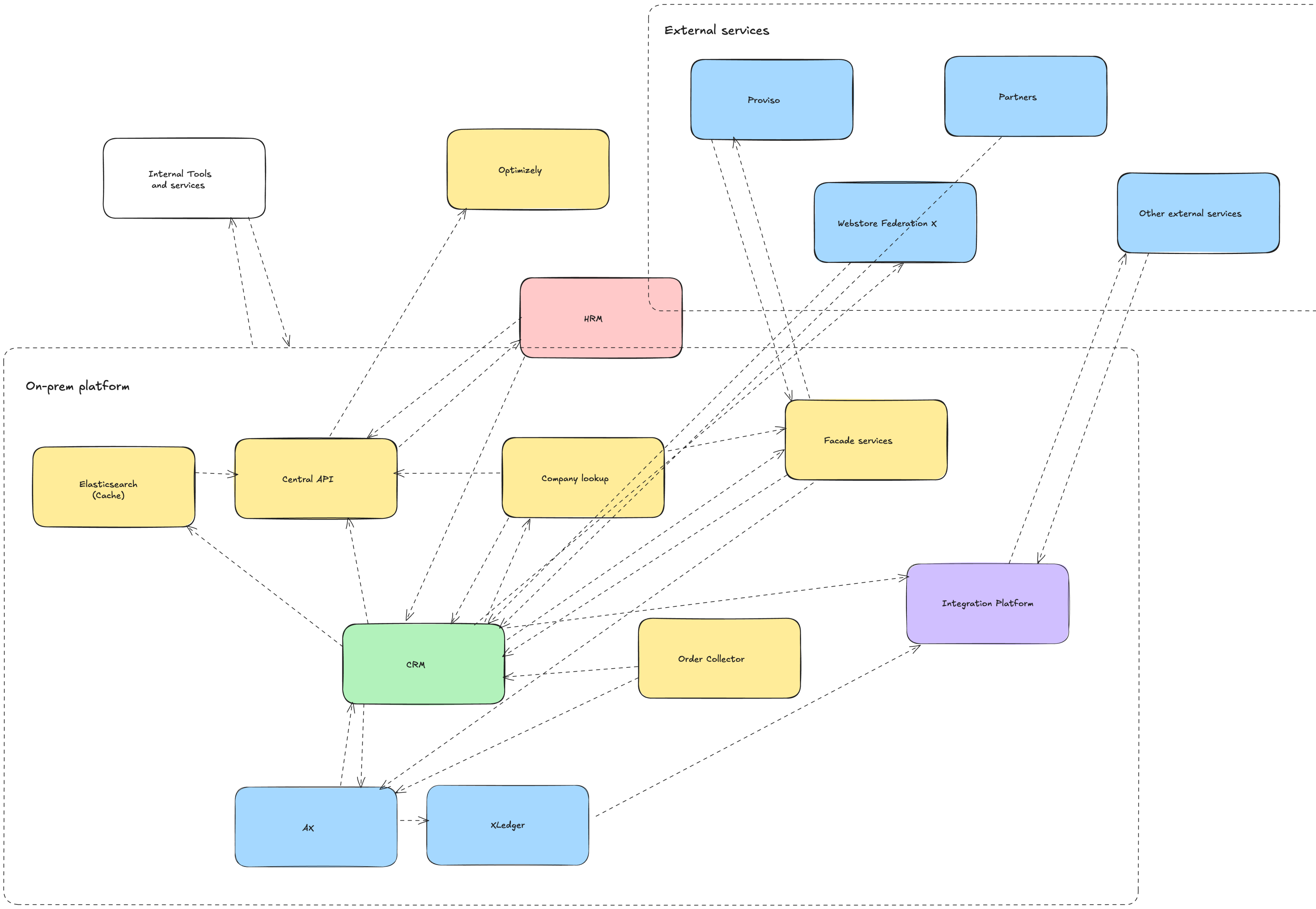
# A brief history lesson

# The organization(s)





# What it looked like



**«Yes, we can do that!»**



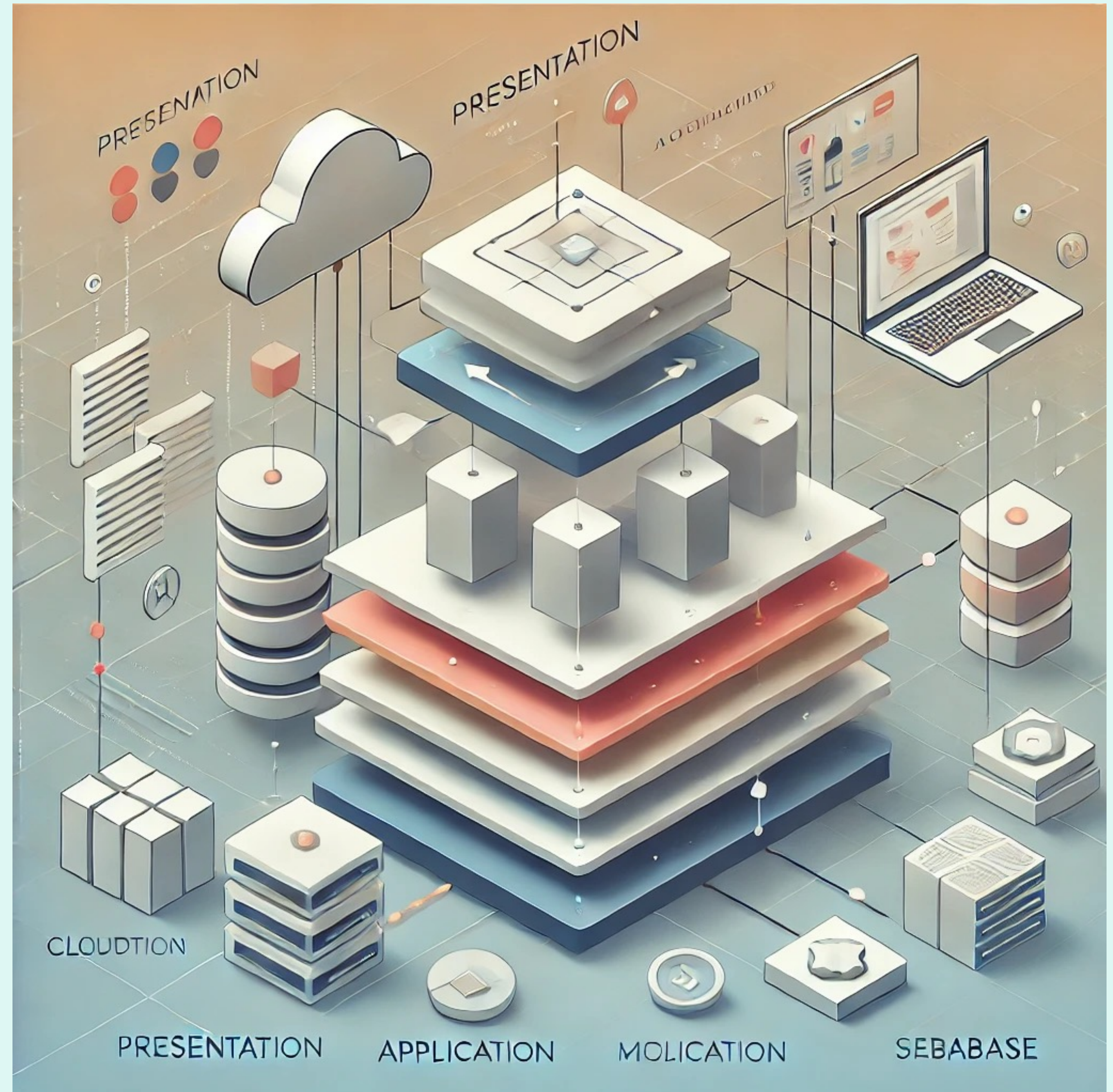
**«We'll use our CRM for that»**

**«What do you think we should do?»**

# 5 strategies to use to renew your IT systems



# Abstractions





## Service offerings

Financial services

Customer Relationship Managment

Content Management Software

Email

And so on...



# Common patterns and defining the future





# Where do you start?





# Shut down services as you go

# 3 challenges to be aware of

# Costly affair



WHO SHOULD PAY?



RETURN OF  
INVESTMENTS?



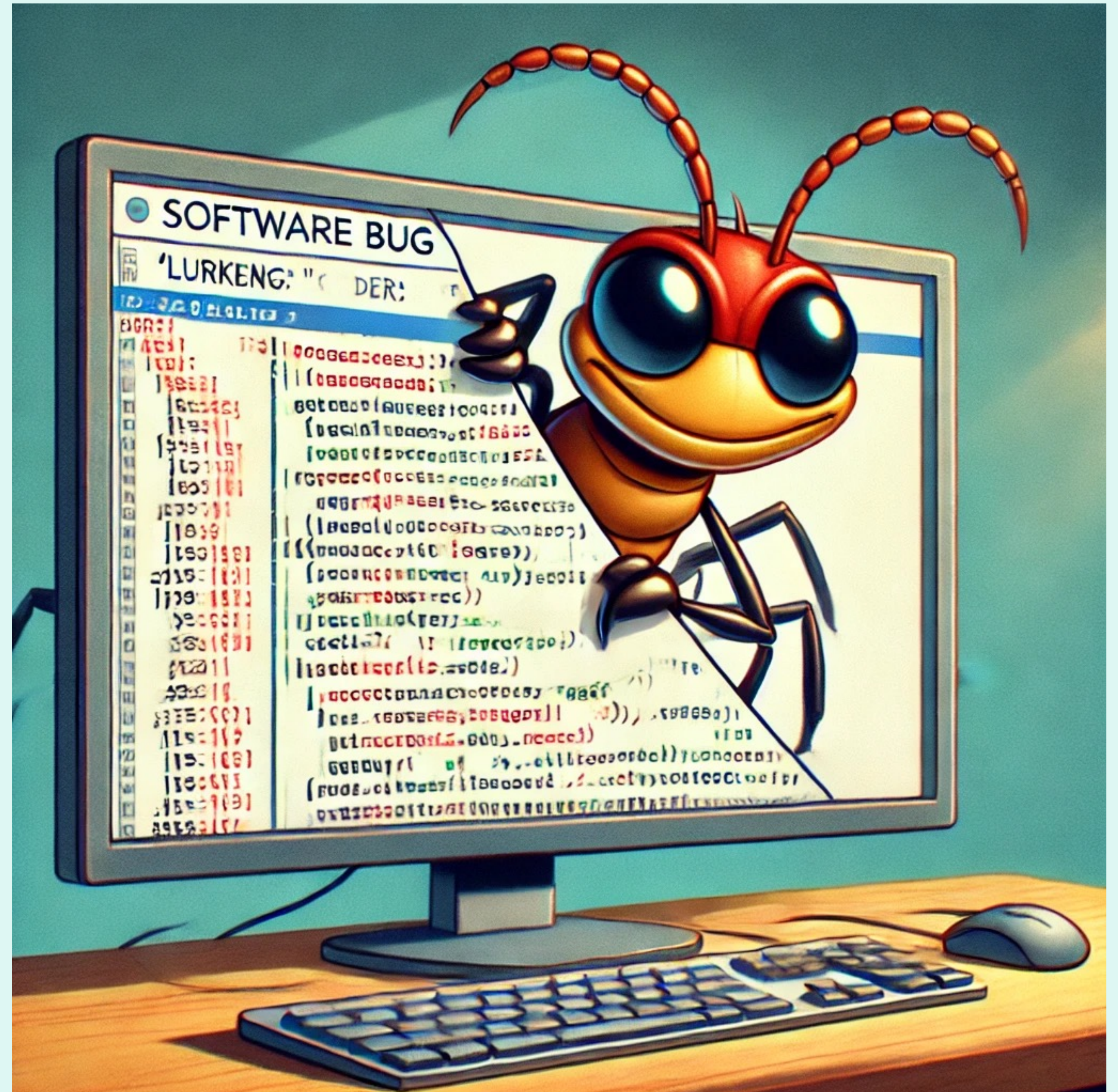
ESTIMATIONS?

# Slow down to speed up





# Fix bugs or live with it?

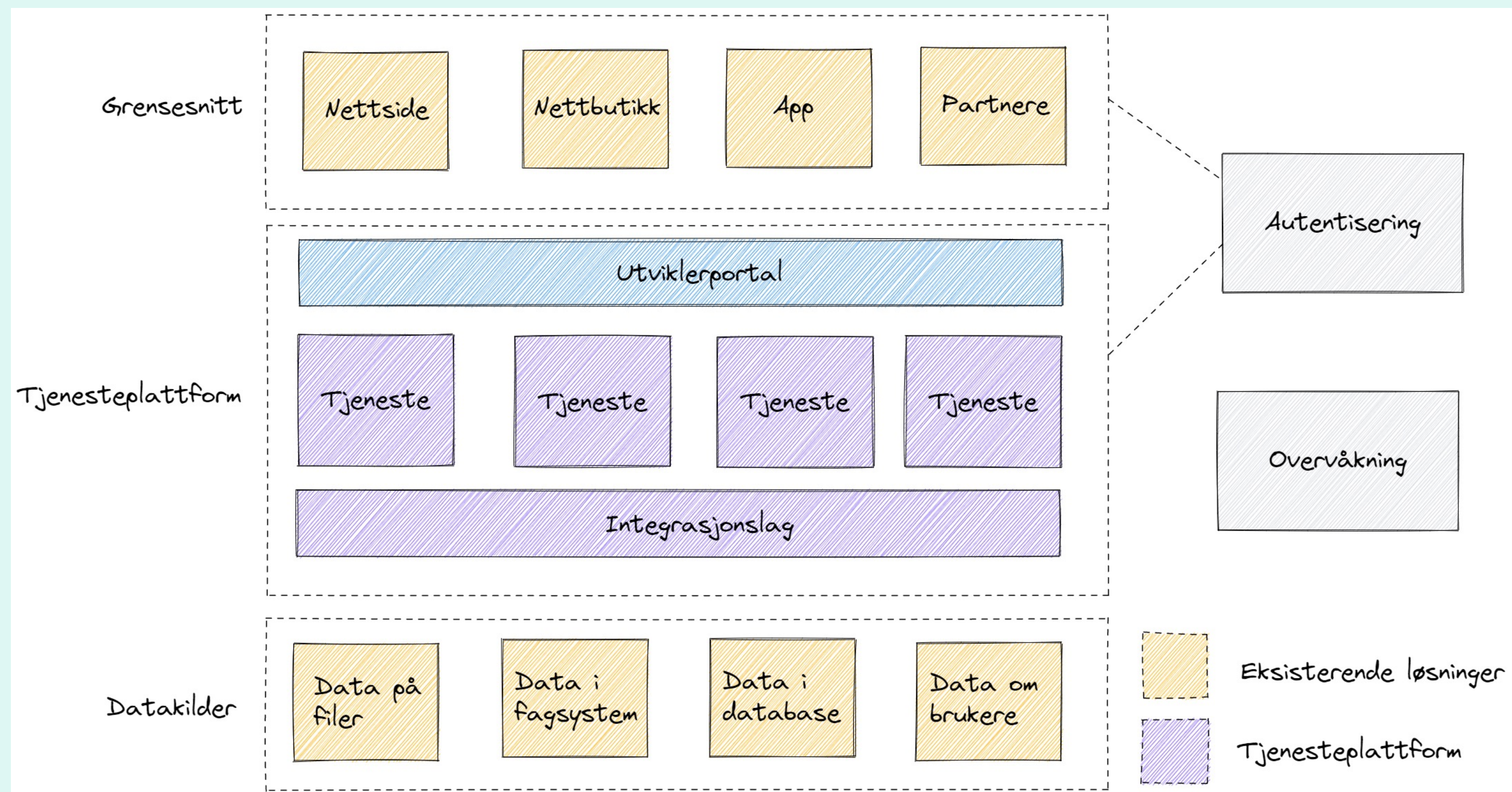




# The fun stuff (AKA the tech stack)



# Current architecture





# Azure services



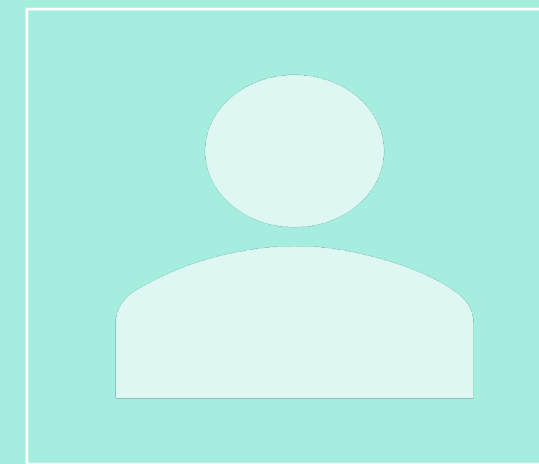
Azure API  
management



Azure Service Bus



PostgreSQL



Azure Function  
Apps



Azure Web Apps



AI Search



Entra ID and Azure  
AD B2C for IAM

# Infrastructure as Code

[bicep/modules/acn-apiconnection](#)

[bicep/modules/ai-applicationinsights](#)

[bicep/modules/apim-apimanagement](#)

[bicep/modules/apim-functionapp-api](#)

[bicep/modules/apim-namedvalue](#)

[bicep/modules/apim-webapp-api](#)

[bicep/modules/app-appservice](#)

[bicep/modules/app-appservice-project](#)

[bicep/modules/app-full-service](#)

[bicep/modules/app-linuxcontainer](#)

[bicep/modules/app-linuxcontainer-project](#)

[bicep/modules/cta-cosmostableaccount](#)

[bicep/modules/eg-systemtopic](#)

[bicep/modules/eg-systemtopicsubscription](#)

[bicep/modules/fa-functionapp](#)

[bicep/modules/fa-functionapp-prject](#)

# Microservices

- .NET 8 with minimal APIs
- Web apps for APIs and business logic
- Function Apps for processing updates

## How to structure your microservice

This blog post will describe a way to structure your code for a .NET microservice.

<https://blog.novanet.no/how-to-structure-your-microservice/>

# Testing & DevOps



INTEGRATION TESTING



TEST CONTAINERS



AZURE DEVOPS  
PIPELINES



APPLICATION INSIGHTS



DASHBOARDS WITH  
STATUSES



# Summary

- No big picture thinking leads to messy design
- Identifying the patterns and the future
- Shut down applications once you're done with it
- Slow down to speed up
- Azure based stack



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# Thank you

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