

**Willst du.
Kannst du.**

karriere.at
ÖSTERREICH'S GRÖSSTES JOBPORTAL

About me

- Software Competence Center Hagenberg

Project Manager
Research Team Lead
Key Researcher

- karriere.at

Chief Enterprise Architect

- University of Applied Sciences Upper Austria

External Lecturer



“

The life of a software architect is a long (and sometimes painful) succession of sub-optimal decisions made partly in the dark.

Philippe Krutchen

karriere.at als Arbeitgeber



karriere.at Group: Unsere Vision



Purpose



Wir verbinden Unternehmen und Talente.

Mehr als 250 Mitarbeiter*innen

davon ca. 70 im
Technology Bereich





2 Standorte

Linz und Wien

karriere.at

DESTINATION CLOUD: TALES FROM YEAR ONE OF OUR CLOUD ADVENTURE

Cloud Native Linz, 24.1.2024

adventure 1 of 2 noun

ad·ven·ture (əd-'ven-chər 

[Synonyms of adventure >](#)

- 1 **a** : an undertaking usually involving danger and unknown risks

| a book recounting his many bold *adventures*

- b** : the encountering of risks

| the spirit of *adventure*

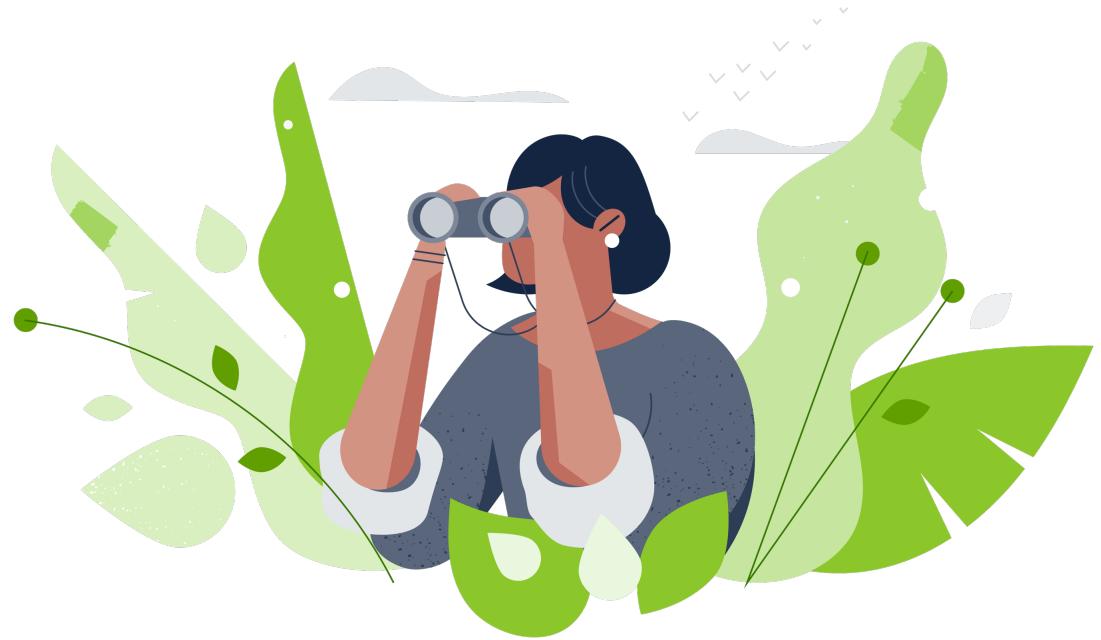
- 2 : an exciting or remarkable experience

| an *adventure* in exotic dining

| They were looking for *adventure*.

- 3 : an enterprise involving financial risk

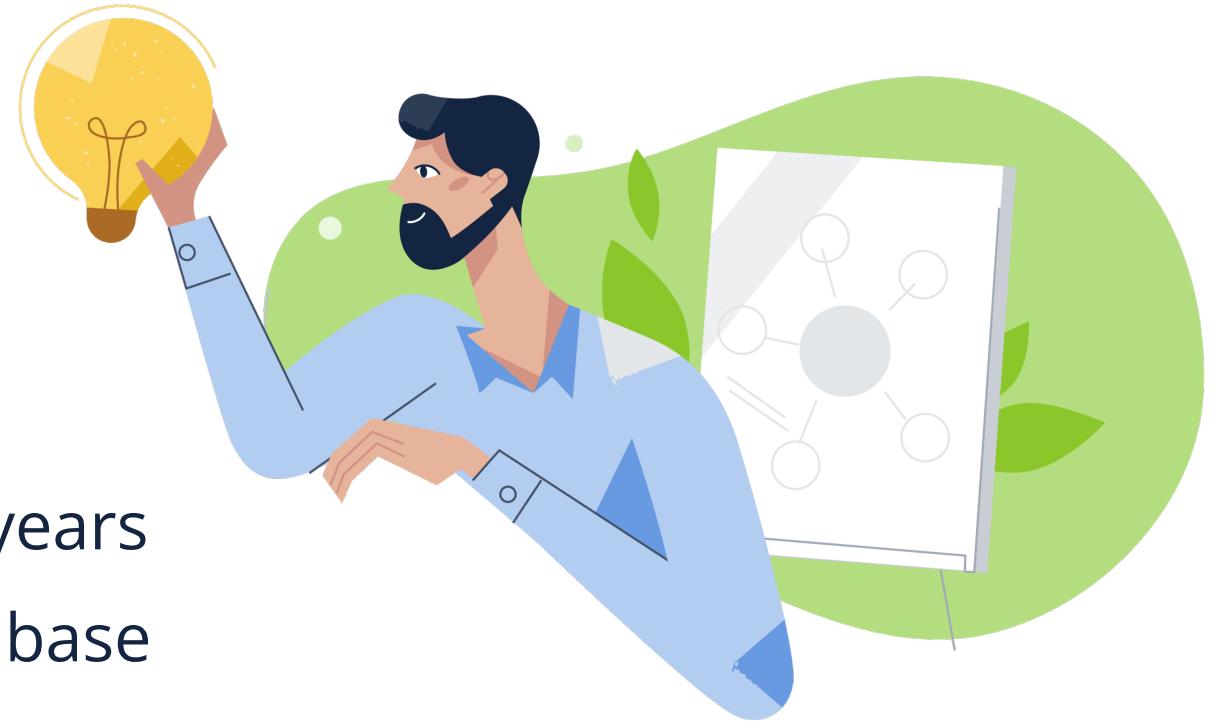
| wanted to pay off her debts before embarking on any new financial *adventures*

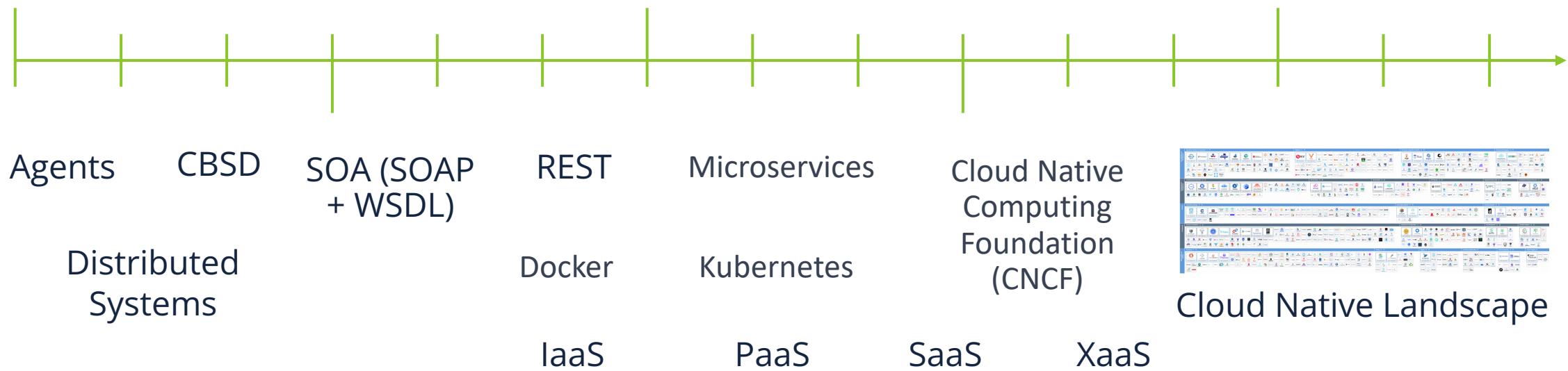


Source: <https://www.merriam-webster.com/dictionary/adventure>

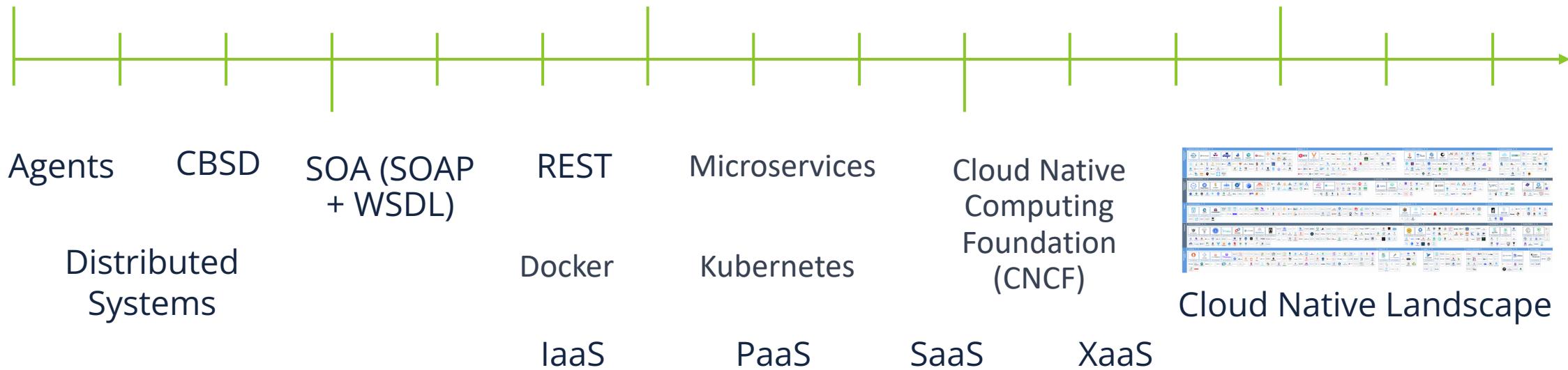
Starting Point of our Adventure

- On premise system landscape
- SPAs, 2 mobile Apps
- Multiple frontend technologies
- 50+ services
- 2 service tech stacks: PHP + Java
- Some applications older than 15 years
- Main pain point – monolithic database





Cloud Computing as Enabling Technology for Speed, Data, and Ecosystems



Microservices

- Advantages
- Challenges
- Holistic Approach
 - Organization
 - Concepts
 - Technology
- Standardized Development Model



Microservice Principles*



Componentization
via Services

Organized around
Business Capabilities

Products
not Projects

Smart endpoints
and dumb pipes

Decentralized
Governance

Decentralized
Data Management

Infrastructure
Automation

Design
for failure

Evolutionary
Design

* James Lewis, Martin Fowler: <https://martinfowler.com/articles/microservices.html>

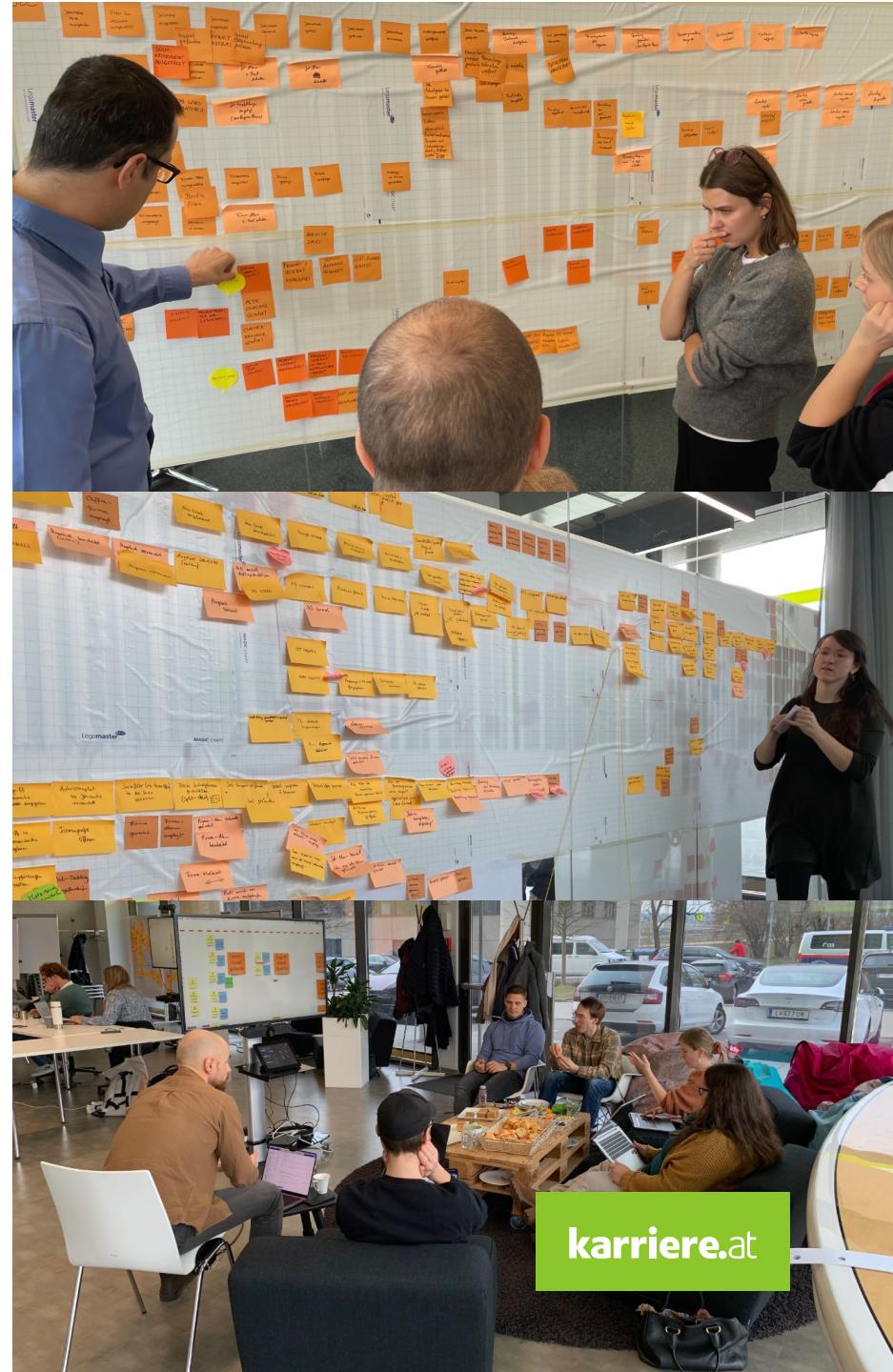
Domain Modelling

- Development of
 - ... a domain model
 - ... ubiquitous Language
- Event storming
- Transformation into a product organization

Organized
around Business
Capabilities

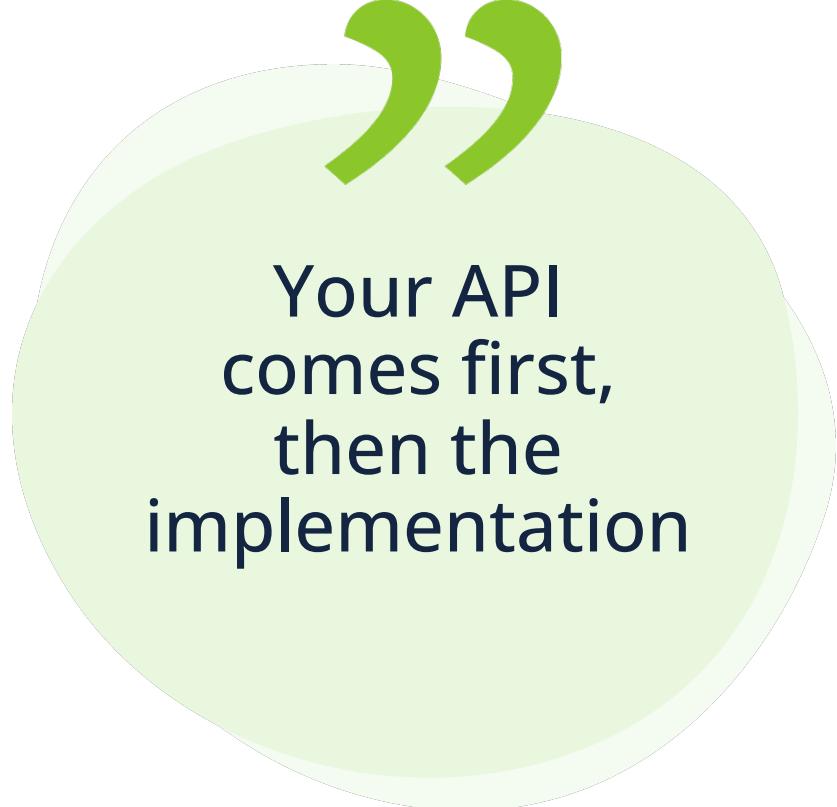
Products
not Projects

Decentralized
Governance



API First

- Each business capability provided as API
- OpenAPI + AsyncAPI + JSON Schema
- Event-driven Architecture



Your API comes first, then the implementation

Componentization via Services

Smart endpoints and dumb pipes

Evolutionary Design

Technology Stack

(Excerpt + Work in Progress)



Componentization
via Services

Design
for failure

Infrastructure Automation

*Our
adventure
so far...*



Thank you
for your
attention!

karriere.at GmbH

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