

AWS

S U M M I T

Building a multi-tenant platform

on AWS in 12 months

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Intro

Enable organizations to build a successful
Development & Innovation ECO-system
using a metaphor from Nature

Focus on:

- Technology
- People
- Learnings

CORPORATE INNOVATION AT
THE HUB.



HRS
Innovation
Hub

Hotel Reservation Service

HRS GROUP



HOTEL INFO



tiscover

Founded in 1972
Online est. 1995



28 offices incl. Berlin, Cologne, Sao Paulo, New York, Moscow, Mumbai, Beijing, Hong Kong, Singapore, Tokyo

Unmanaged

- 300.000 hotels worldwide
- 400.000 holiday homes
- SME Rates & Services
- Desktop and Mobile Apps
- Digital Check In & Out

Managed

- 40.000 S-M businesses
- 5.000 corporates
- Fortune 500
- Sourcing & Compliance
- Payment & Expense

Hotel Solutions

- 80.000 hotels
- Smart rate management
- Distribution
- HD content management
- Operational Analytics



TOYOTA



Alibaba Group



About myself



20+ years experience as
technical Manager for:



Technology in our ECO-system

Clouds in the Sky



In Nature:

- Clouds are difficult to predict
- They never do as expected

We should use a different word to describe computing

Soil – the foundation for our ecosystem



Soil-Computing

What does our Soil look like

Microservices (Spring Boot)



Short Living Functions (Funktion)



Container Orchestration (Kubernetes)



Monitoring/ Metrics (Prometheus)



Infrastructure as Code (Cloudformation)



Cloud Provider (AWS)



SCM / CI (Gitlab.com)

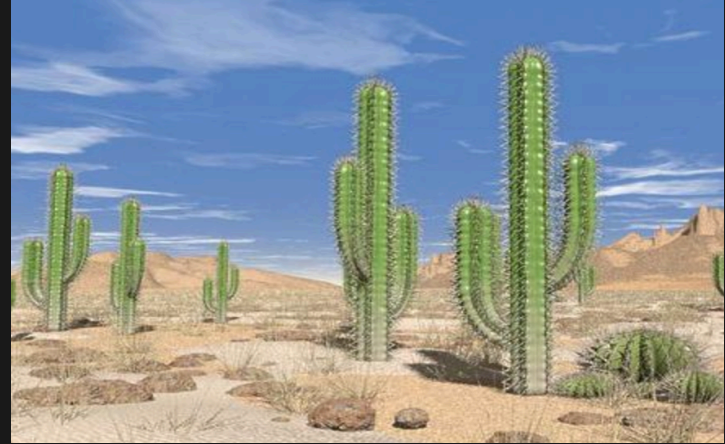


The first Seeds

We start with the Green field



But what we really face



Multi-tenancy and just one greenfield

- The first tenant is also our first garden
- There is another garden right next to us
- Make a rough plan for the garden
- Share the tools and the learnings
- Plant seeds for flowers and trees
- Explore what grows best
- Remove fences
- Try to remove the cactus



The Flower API's and the Trees

Seed = Container
Flower = Microservice
Blossom = API
Pruning = Optimizing



Weed the garden = Refactoring



People in our ECO System

The Worker Bee

= Developers

- Going out to our Flower APIs connecting the dots
- Gathering the honey
- Exploring new flowers
- Sharing the knowledge



The Builder Bee

= DevOps

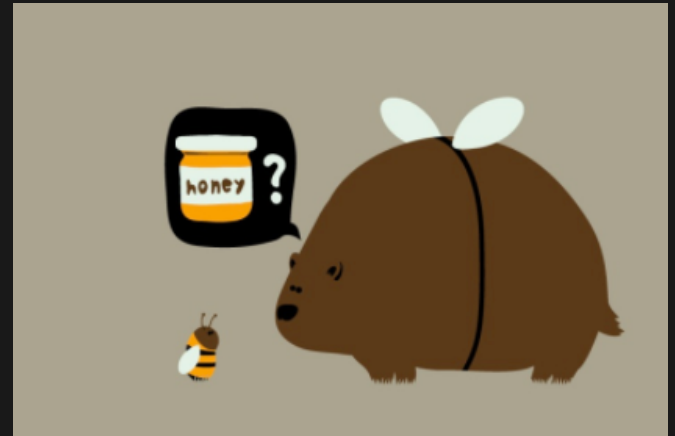
- Building the strongest infrastructure with the least amount of code
- Ability to scale the infrastructure
- Sharing the knowledge



The Organizer Bee

= Product Owner

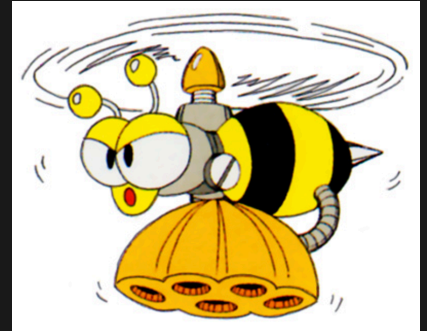
- learning about new flowers out there and telling the other bees where to find them
- Focus on the customer and ensuring the Honey tastes sweet (product)



The Heater Bee

= Stakeholder

- Heating up the environment with deadlines
- Cooling it down with agile mindset and empowering bottom up circulation



The Bee Keeper



Beehive Principles

We do not always succeed in finding our beehive and producing honey.

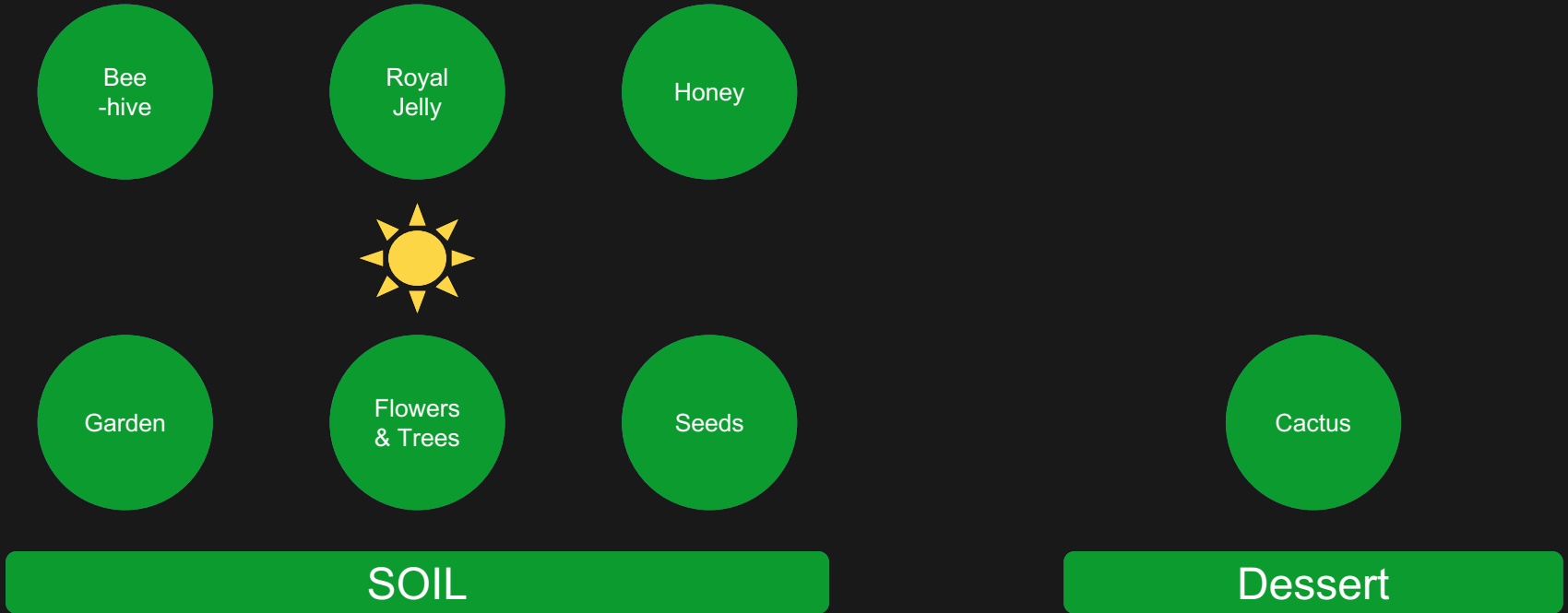
The nectar and pollen is either a research area supported by an idea providing us with statistically relevant information to stop the research...

...or some hype that enables us to come up to surface with a disruptive new product.

- Work and thrive in collaboration
- Recognize patterns, that have been developed over iterations of “good practice”
- Self-organized workforce



The ECO-system



ECO-system - Learnings

#1 Learning

Innovation is not only about fast prototyping
- it can also be sustainable and complex

#2 Learning

Greenfield is not enough

- think about your Garden and remove fences

#3 Learning

The other beehives will also just produce honey
- there is no “Innovation Bee”

#4 Learning

Keep it as simple as possible
- swarm out and get started

#5 Learning

Learn from your bees

Keep a clear focus and purpose for them in your Garden

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