

# FLEX - Introduction

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Created: 2023-04-25 Tue 08:07

# Michael Sperber

- CEO, Active Group GmbH, Tübingen
- software project development
- ... using functional programming: Scala, Haskell, Clojure, OCaml, F#, Erlang, Elixir, ...
- Ph.D. on functional programming in 2001
- research on intro courses in programming
- developed FLEX with Simon Härrer



@active group

# Software Architecture

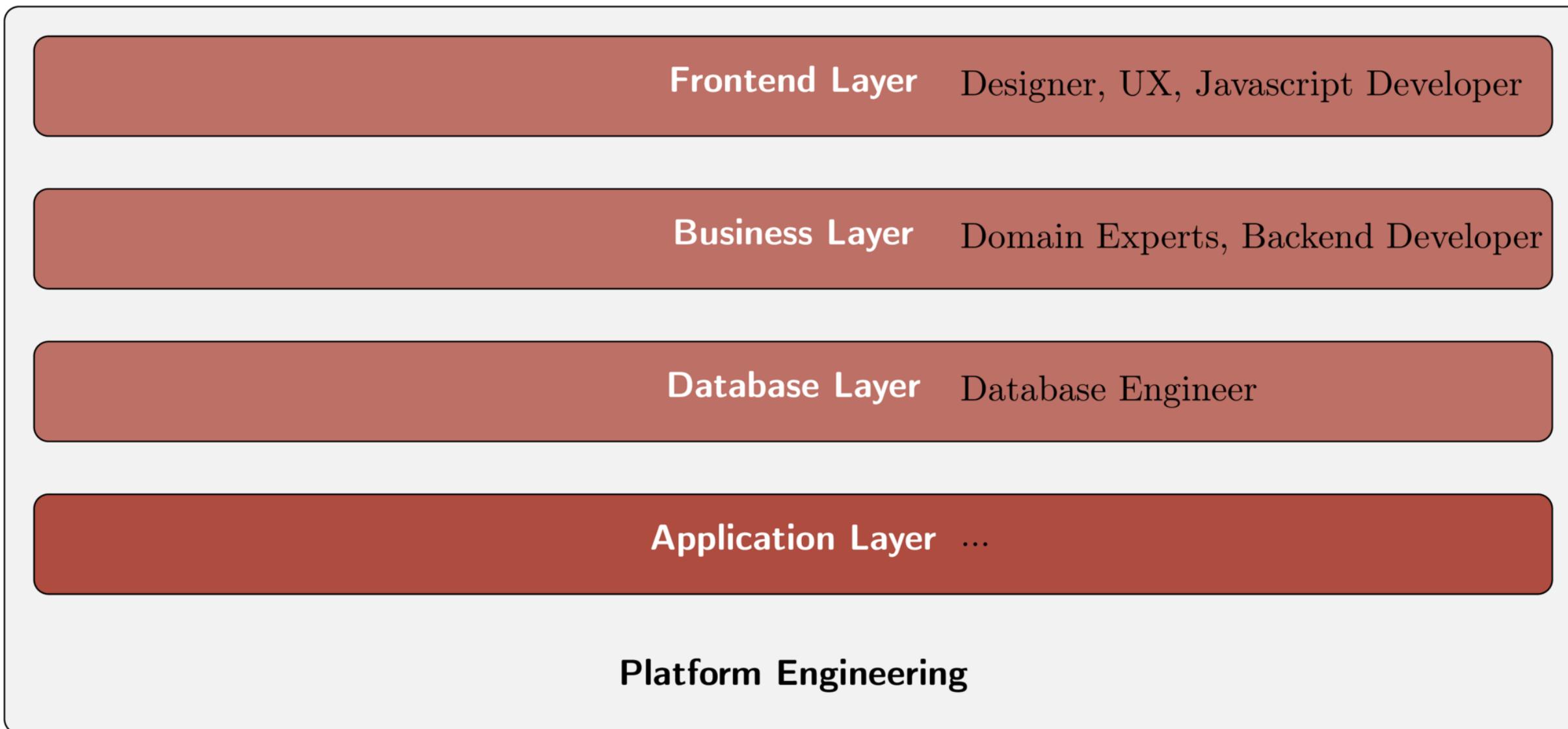
- large systems
- long-lived systems

# Teams

"We try to create teams that are no larger than can be fed by two pizzas," said Bezos. "We call that the two-pizza team rule."

<https://docs.aws.amazon.com/whitepapers/latest/introduction-devops-aws/two-pizza-teams.html>

# Teams



# Avoid

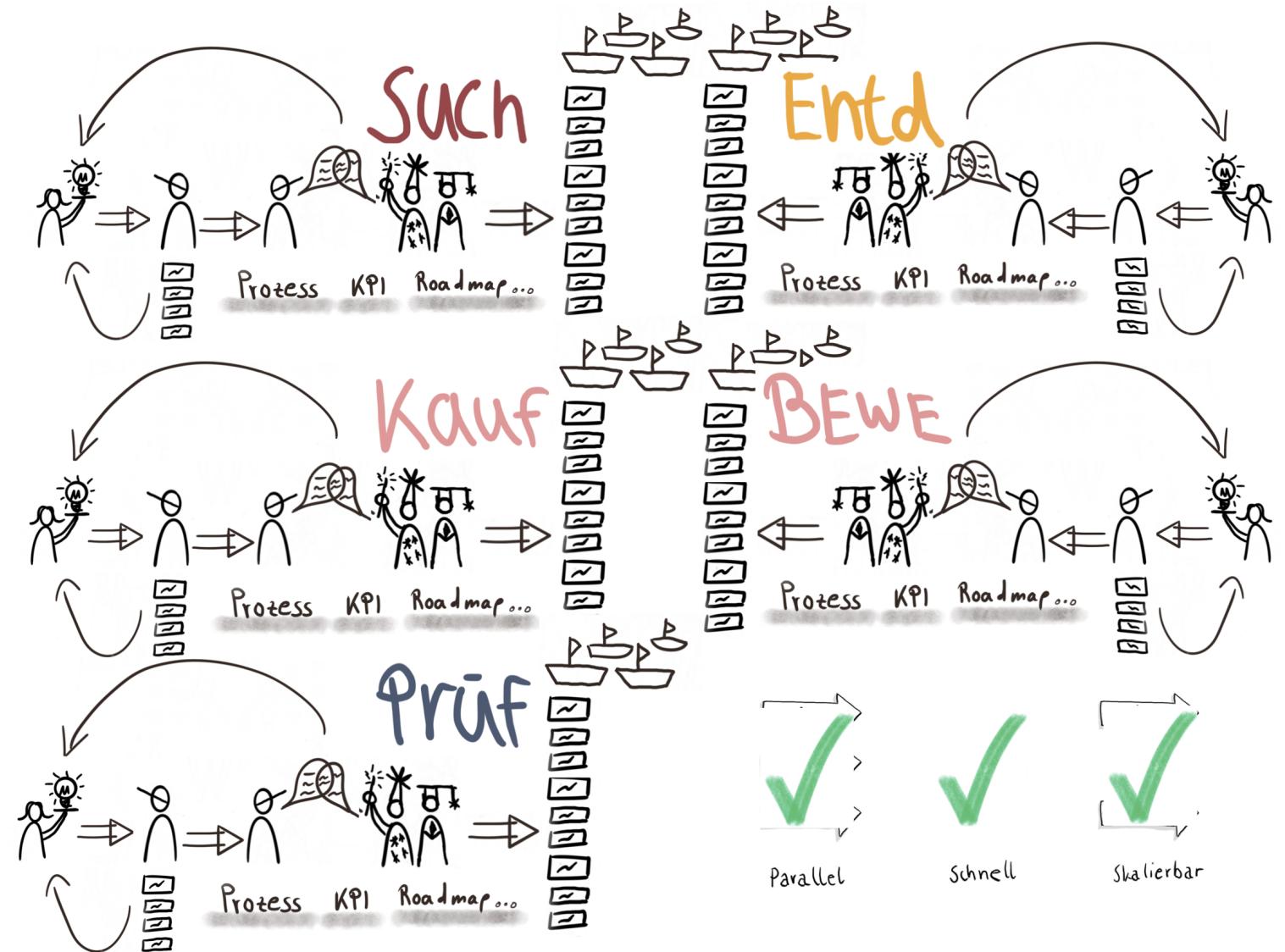


# Organizational Problems - Conway's Law

“Organizations which design systems [...] are constrained to produce designs which are copies of the communication structures of these organizations.”

Melvin E. Conway: How Do Committees Invent?

# Self-Contained Systems



# Properties

- maximize decoupling
- minimize sharing
- forgo synergies

# Schedule

- day 0 (today): Erlang intro
- day 1: Erlbank
- day 2, 3: split Erlbank into self-contained systems