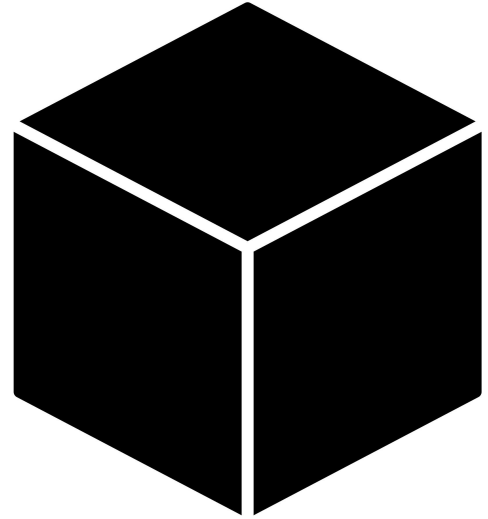


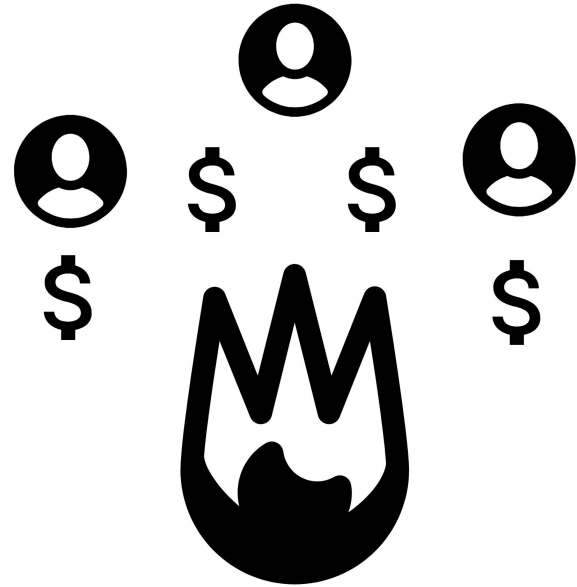
# Decision making in black box scenarios

Boyan Angelov



# A story

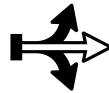
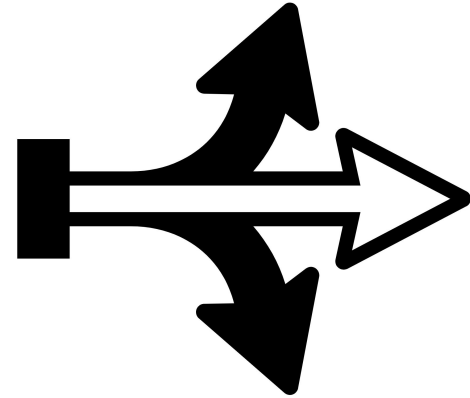
- Legacy black box
  - Complex
  - Arcane
  - No support
- Critical
  - Operational bottleneck
  - Financial repercussions
  - No backups



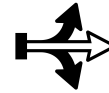
Stay tuned for the ending...

# The importance of decision making

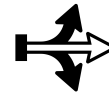
- Thousands per day
- Relative importance
- Stacking up
- No decision is a decision
- Consequences



Deciding to select a tech stack

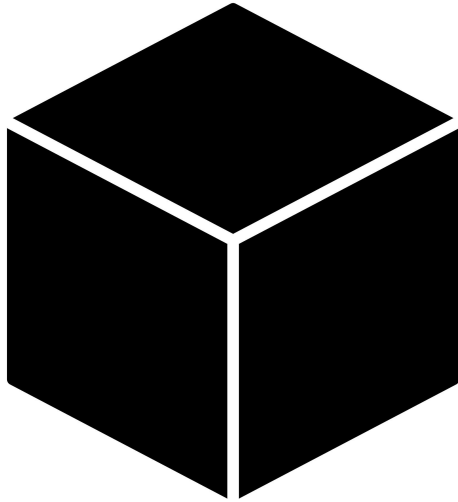


Prioritizing a task or a project






Deciding to hire

# Defining black boxes



Any system that we can't understand fully under constraints.

-  Legacy systems
-  Complex systems
-  Large teams

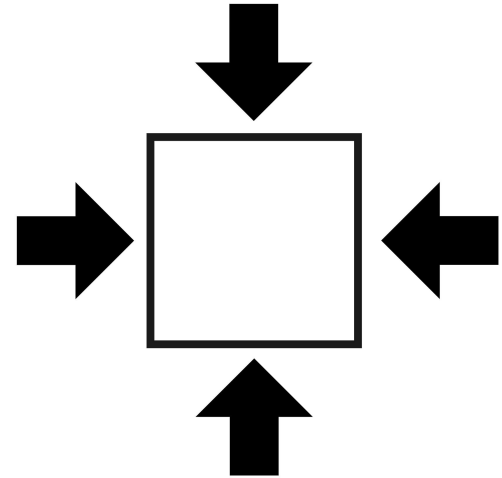
# The problem: constraints

With unlimited time, we can understand *any* black box and make a perfect decision.

→↕← Knowledge

→↕← Budgets

→↕← Time



# Solution: two new types of thinking



Engineer

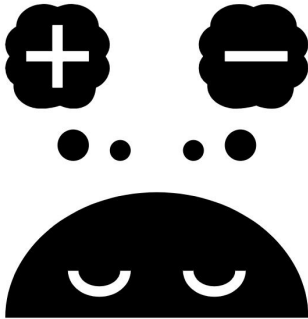


Zen monk



Scientist

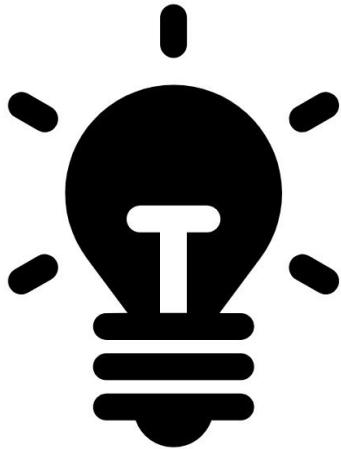
*Our normal mode of operation.*



- Leave it be
- Wait
- Don't rush
- Respect the system

- Have a scientific approach: conduct controlled experiments (i.e. switching on and off of components)
- Recognize boundaries
- Recognize relationships and feedback loops
- Measure and change inputs and outputs
- Replicate the system

# How the story ended



- With all those methods we saved the day
- It remained a black box, but under control
- Moved to a new system

# Parting thoughts

Become a **systems thinker** (zen monk + scientist)!

It's a skill that can be learned.

Happy unboxing!

