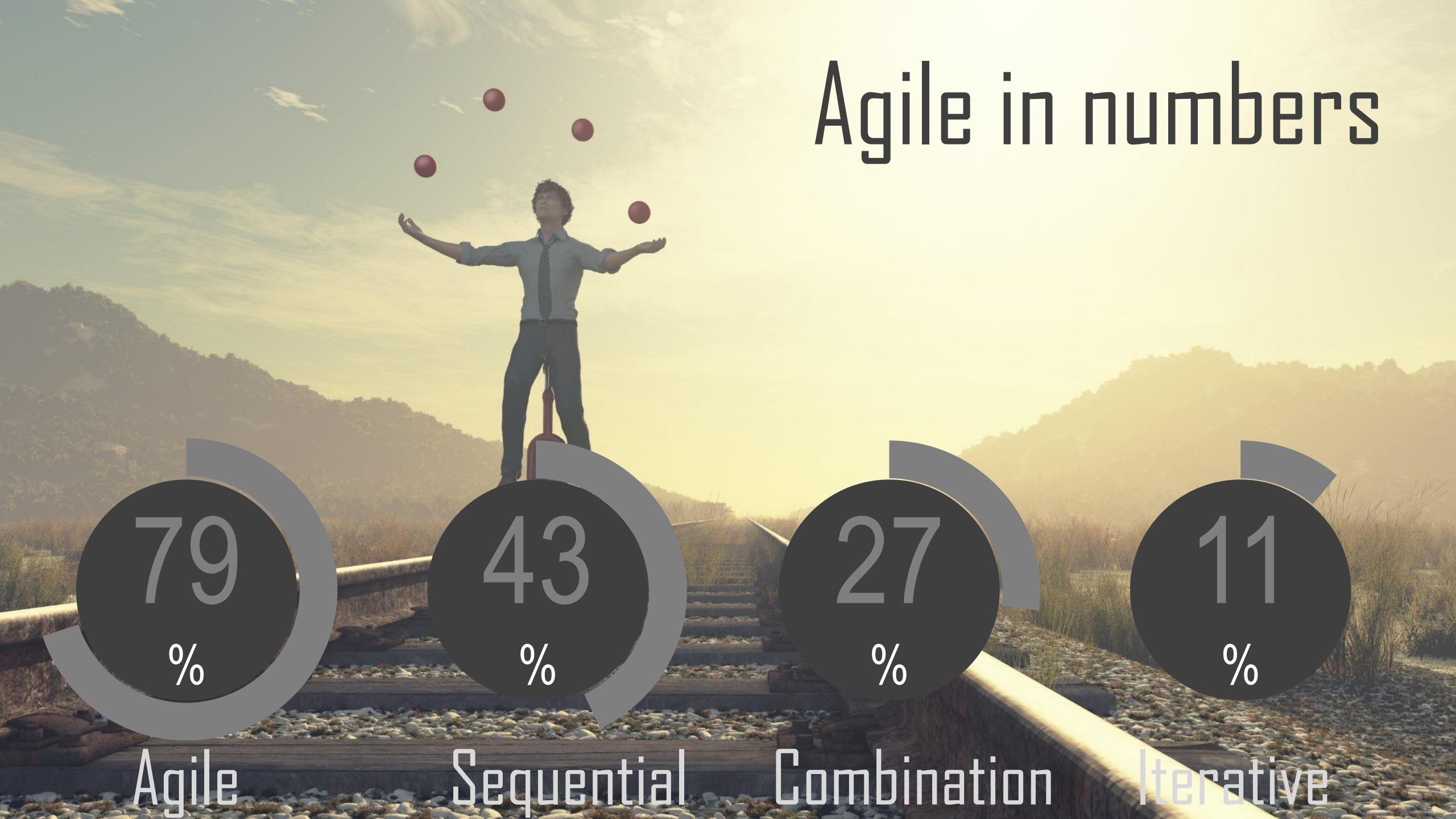
moveIT
Strategic Agile Thinking

6 DECEMBER,2018 I Michaël Pilaeten

Agile in numbers



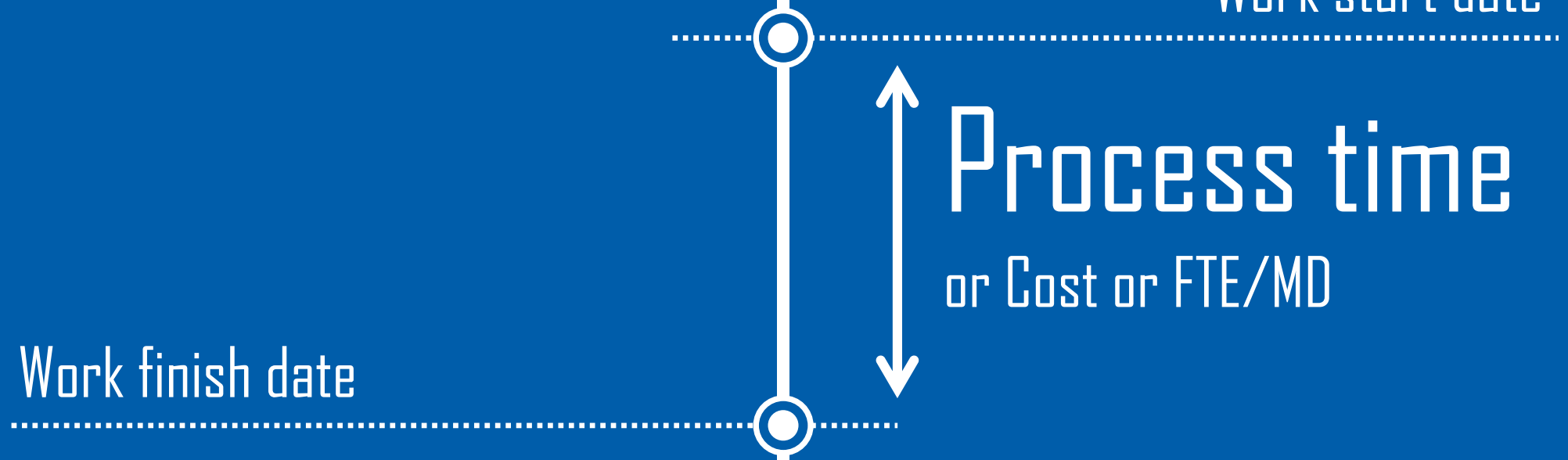
Problem 1
We start too late

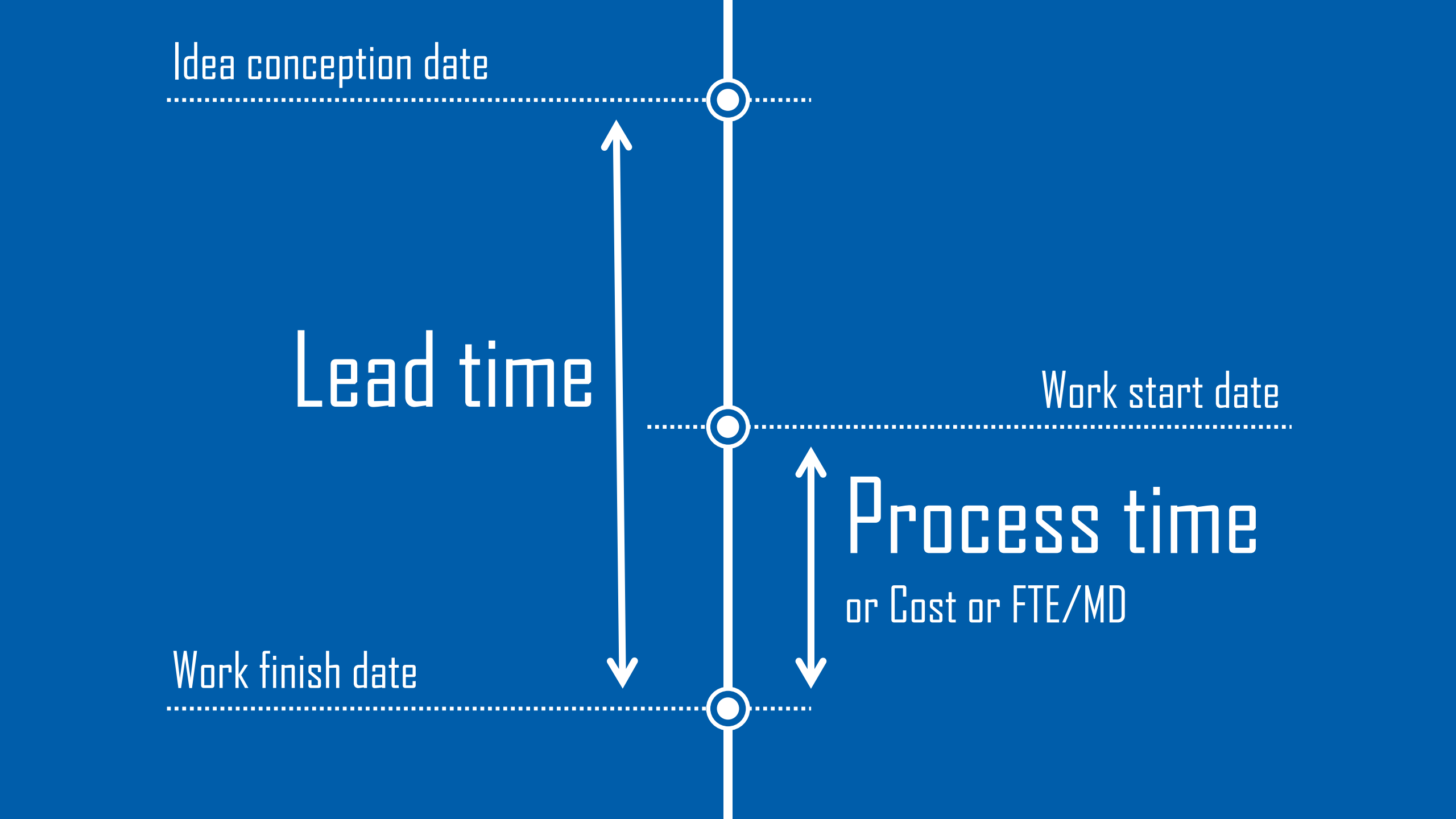
Work start date

Process time

or Cost or FTE/MD

Work finish date

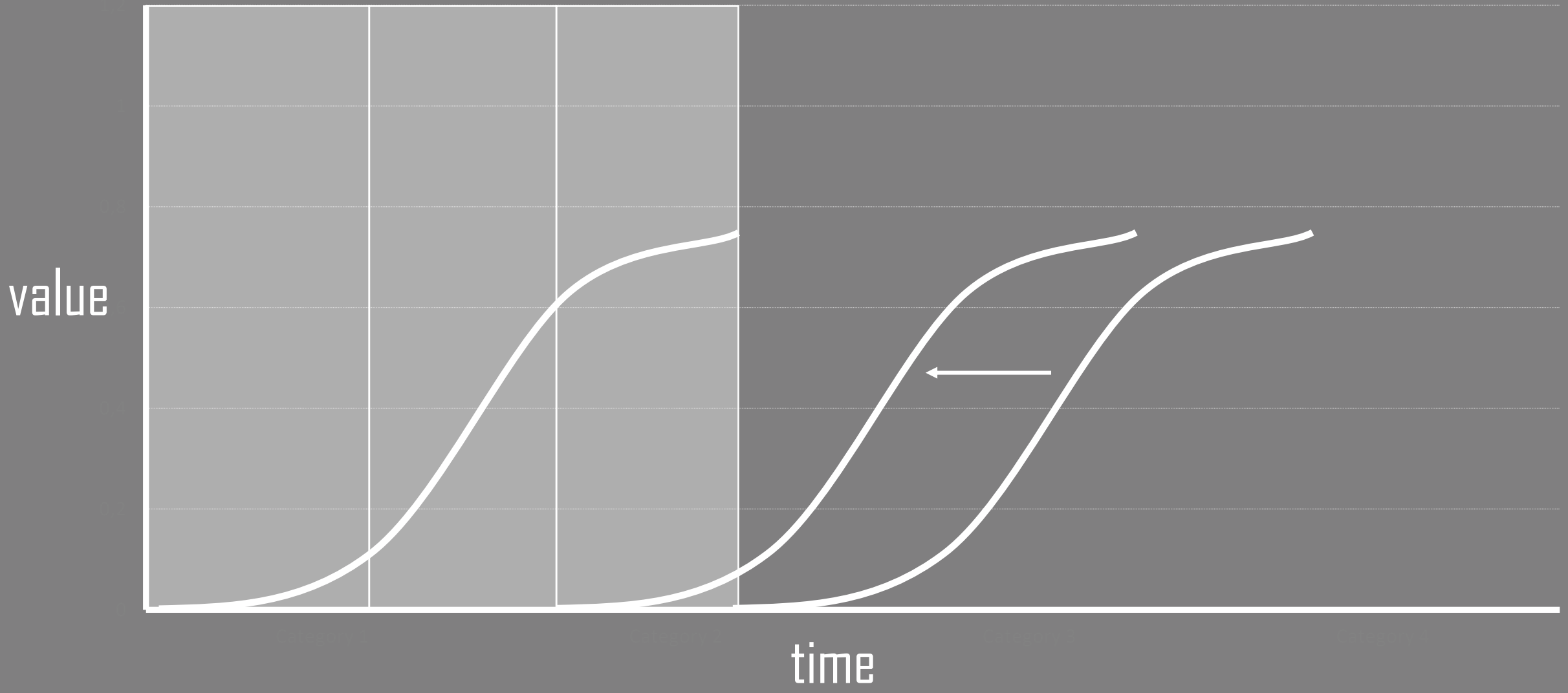



Idea conception date
Lead time
Work start date
Process time
or Cost or FTE/MD
Work finish date

Problem 2
We don't know when to stop

Sunk Cost Fallacy

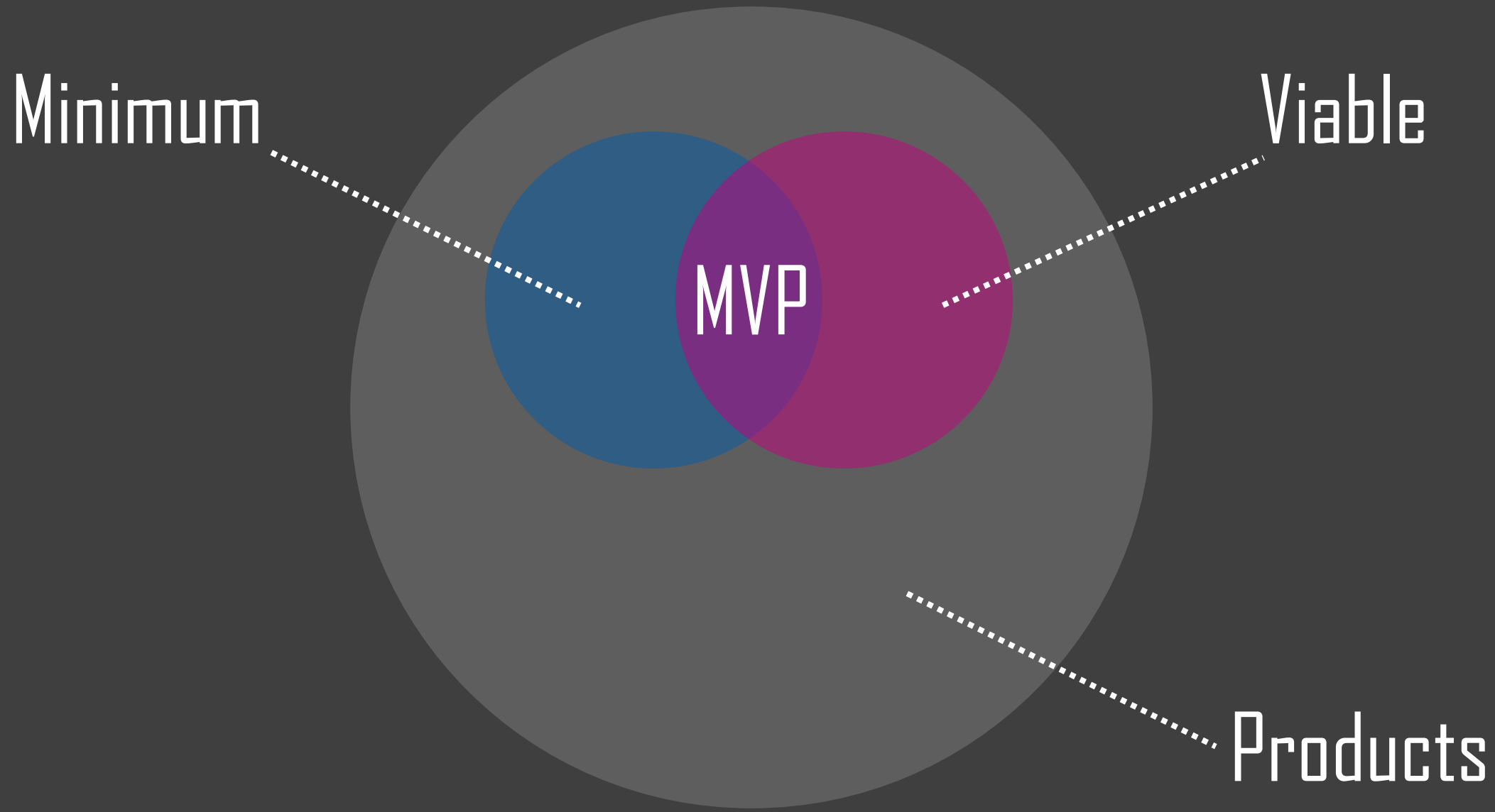
The innovator's dilemma




Problem 3
We don’t know what we want

Survival of the fittest


djTrump.com


Minimum
Viable
MVP
Products

Problem 4
We can't predict quality

What Drives Quality

A Deep Dive into Software Quality with Practical Solutions for Delivering High-Quality Products

BEN LINDERS

REQUIREMENT

QUALITY

STABILITY

COMMITMENT

REQUIREMENT QUALITY

From?

But...

COMMITMENT

REQUIREMENT QUALITY

STABILITY

What?

But...

REQUIREMENT QUALITY

 fixed AND flexible

 never commit

Problem 5

We don't know how to prioritize

the endowment effect

mine

not mine


Problem 6
We're reluctant to change

this is your comfort zone

this is where the magic happens

But...

Those testers should not touch my code!
My precious...

this is your comfort zone

this is where the magic happens

But...

These developers shouldn't test. Everything passes.

Problem 7
We start too big

Little's Law

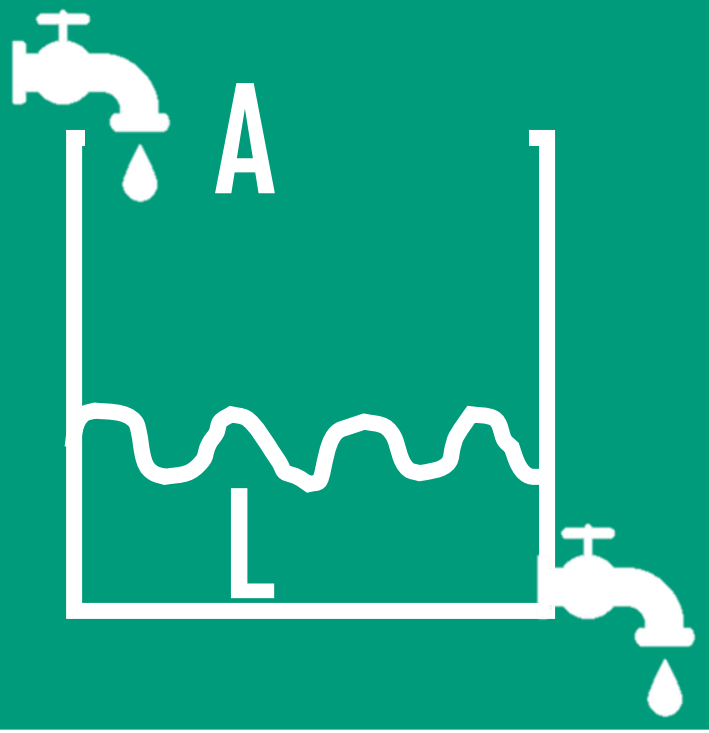
$$L = AW$$

$$W = \frac{L}{A}$$

L = current number of items

A = input / output flow

W = average time to process an item



L = 100 liters

A = 20 liters / minute

$$W = \frac{100\ liters}{20\ liters\ per\ minute} = 5\ minutes$$

Little's Law

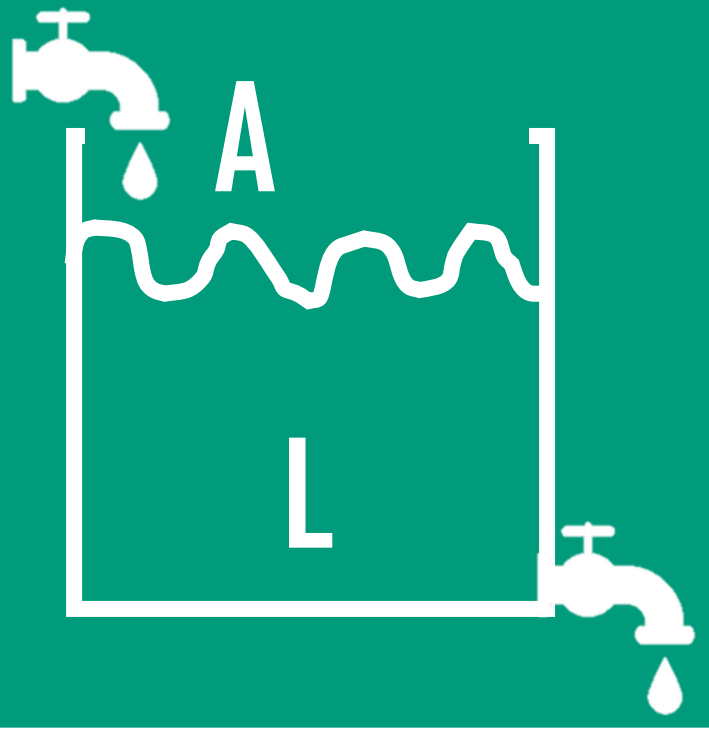
$$L = AW$$

$$W = \frac{L}{A}$$

L = current number of items

A = arrival rate of new items

W = average time to process an item



L = 200 liters

A = 20 liters / minute

$$W = \frac{200\ liters}{20\ liters\ per\ minute} = 10\ minutes$$

Little's Law in software

$$WIP = TP \times LT$$

$$LT = \frac{WIP}{TP}$$

WIP = backlog size
TP = throughput (velocity)
LT = lead time

WIP = 500 story points
TP = 100 story points / day

$$LT = \frac{500\ story\ points}{100\ story\ points\ per\ day} = 5\ days$$

Little's Law in software

$$WIP = TP \times LT$$

$$LT = \frac{WIP}{TP}$$

WIP = backlog size
TP = throughput (velocity)
LT = lead time

WIP = 1500 story points
TP = 100 story points / day

$$LT = \frac{1500\ story\ points}{100\ story\ points\ per\ day} = 15\ days$$

Little's Law in software

What do you want to do?

Increase velocity

↓

Limit WIP

Reduce lead time

↓

Limit WIP

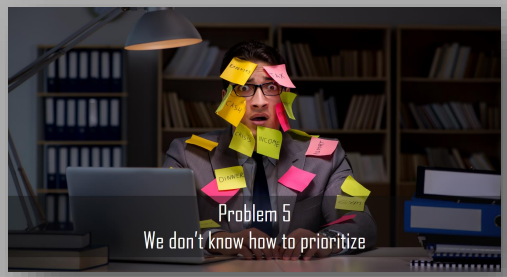
Little's Law in software

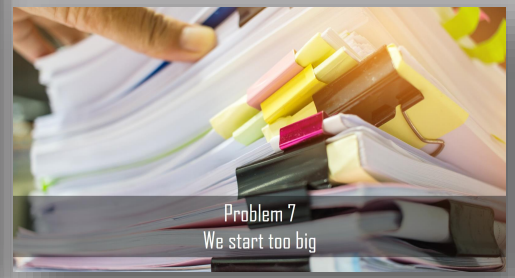
One last thing...

Context Switching

The end
a final takeaway


Any agile transformation





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