Myths of innovation

The fallacies that cause delays, undermine intentions and raise frustrations

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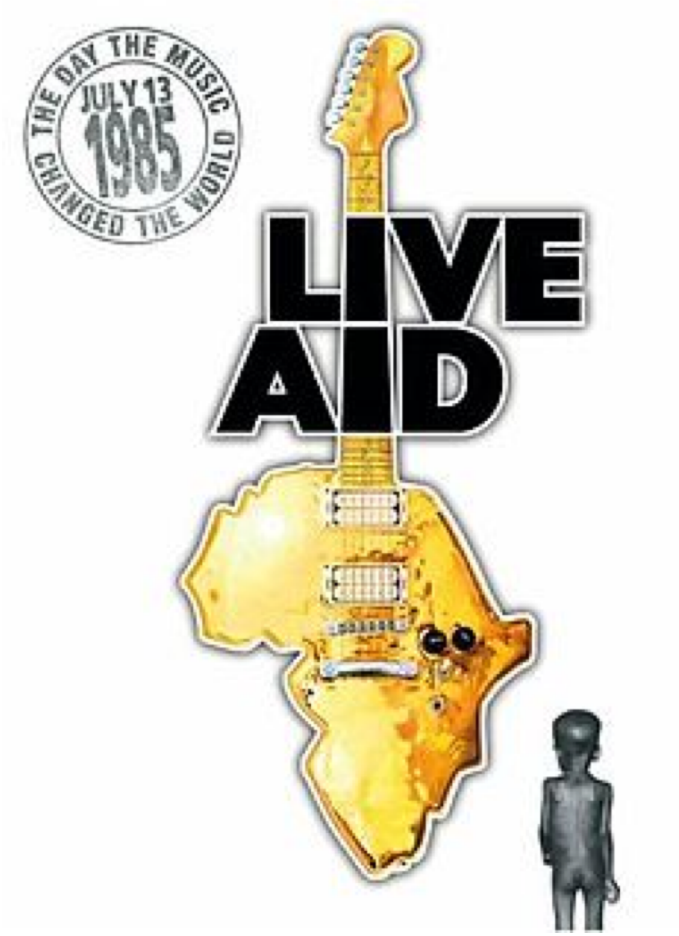
THE EUREKA MOMENT


THE DAY THE MUSIC
JULY 13
1985
CHANGED THE WORLD
LIVE
AID

WHAT HAPPENS?

- → *A lot of ideas*
- → *They get stuck*
- → *I lose all my energy*
- → *The question dies*
- → *We rush forward!*

Research shows:

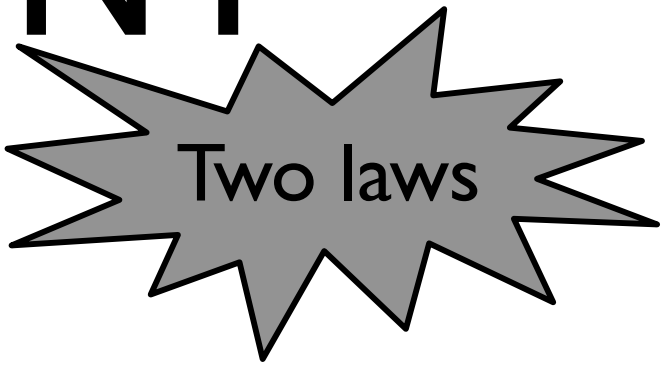
The innovation **challenge** is **NOT** lack of **ideas.**

The **real challenge**...

...is the **IMPLEMENTATION**

TO CREATE IS SIMPLE!

TO IMPLEMENT IS ART!



Fallacy #1

THE EUREKA MOMENT

Viable solution:

UNDERSTAND TWO CRITICAL LAWS

WHAT IS SPECIAL ABOUT THE CONTEXT OF INNOVATION?

Production

Innovation

INNOVATION – A PROCESS OF OPEN-ENDED SEARCH

Law number 1: Little's law

Throughput time=flow units in process*cycle time^

Throughput time=number of projects*cycle time

^Time between units finished

LITTLE'S LAW: 2 CHALLENGES

Start new projects (too) early...

...competition for resources = size of queue longer

Innovation work is an open-ended search process = cycle time is uncertain!

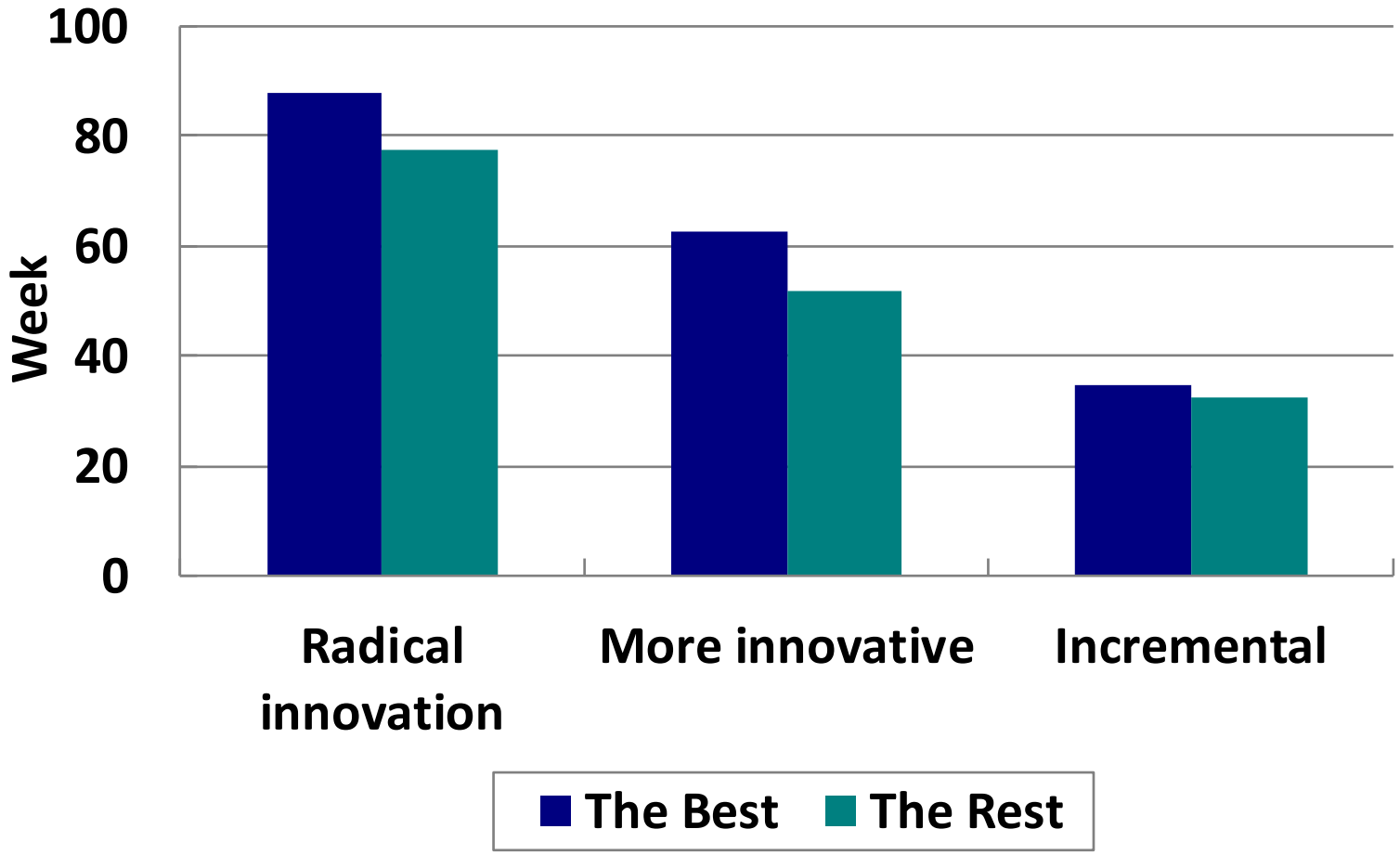
Viable solutions

- Take time to **define the problem to solve** – to identify the goal and hypothesis to test along the way
- Work actively with **hypothesis testing** – revise as evidence unfolds
- Carefully **monitor when to start projects** – are there resources available to pursue the project available. If not. Wait. **Prioritize**.

Implication of law 1:

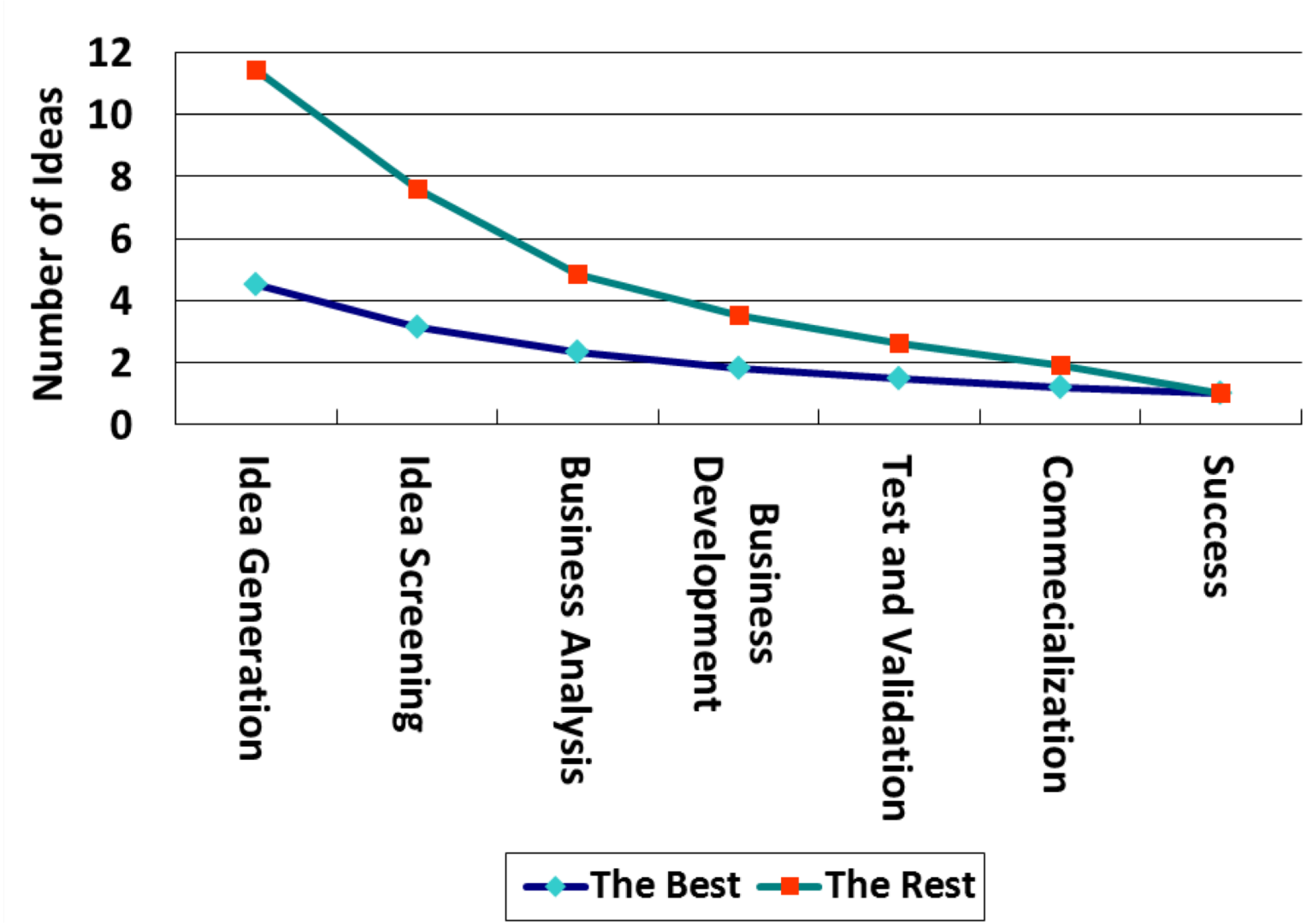
Kill projects instead of adding projects

Best performer spend more time per project



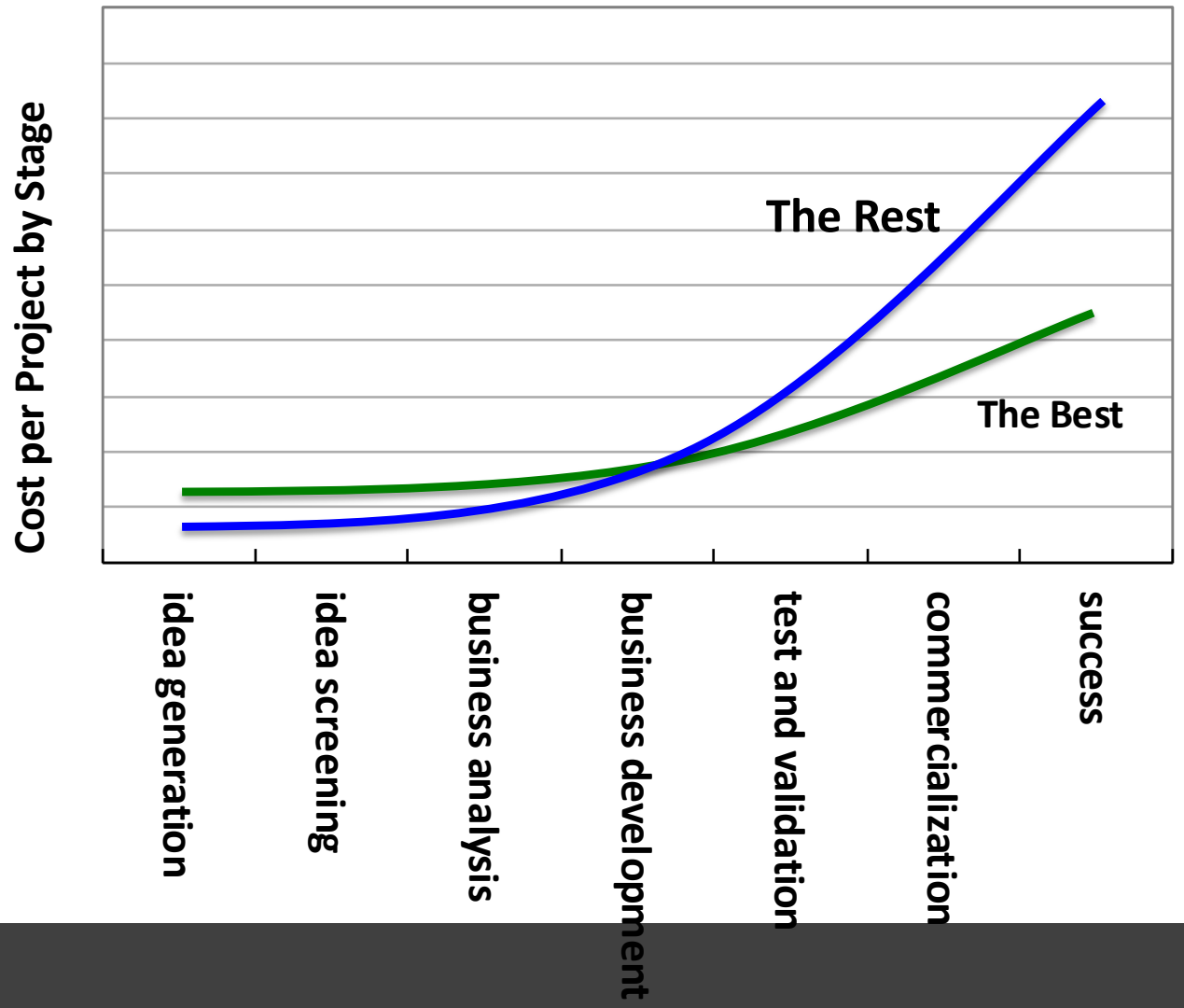
Source: Markham & Lee, 2013

…but on fewer projects



Source: Markham & Lee, 2013

Cost per successful project



Source: Markham & Lee, 2013

Law number 2: VUT-relationship

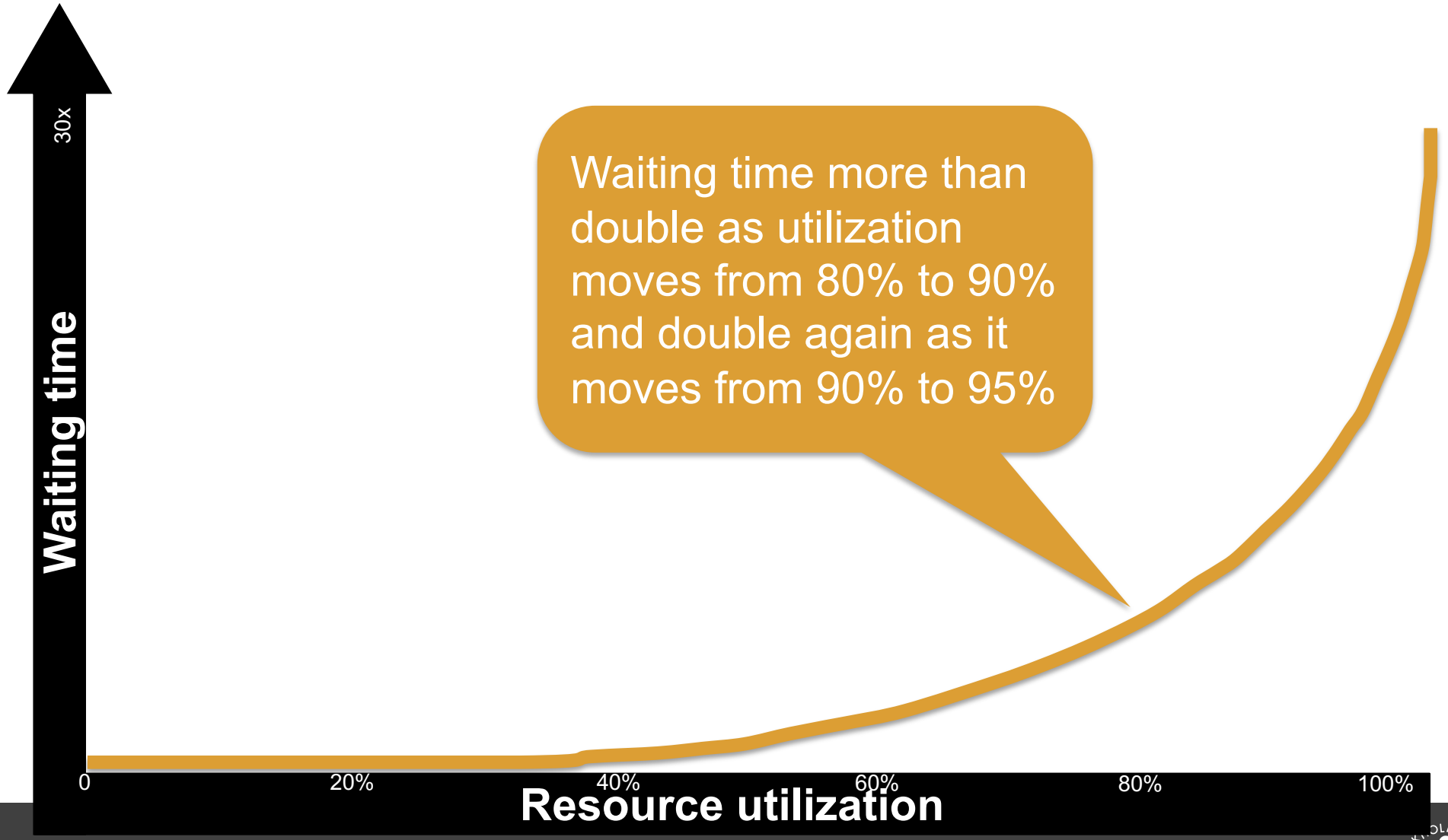
VUT-relationship: 2 challenges

- High utilization of resources will not improve performance *because:*

1. Need to take into the full account of variability of development work

2. In innovation work, work-in-process inventory is predominantly invisible

High utilization leads to delays – the VUT-relationship



Source: Thomke & Reinertsen, 2012

Viable solutions

- **Introduce resource slack** where utilization is highest
  - *Selectively increase capacity*
- Make the **work-in-process inventory easier to see**
  - *Visualization / work-in-process control boards*
  - *Make queues and information flows visible*
- **Quantify the cost of delays** and factor it into decisions
- **Limit** the **number** of **active projects**

Implication of law 2:

Provide a capacity buffer in processes with high variability

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TO IMPLEMENT IS ART!