



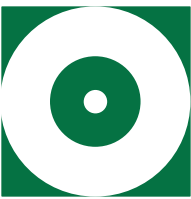
“Extreme Ownership: The Principles of Effective Leadership”

AGENDA



- ▶ Definition and Principles
- ▶ Examples
- ▶ Obstacles
- ▶ Engineering Teamwork Context

*What Extreme Ownership
means to leaders and teams*



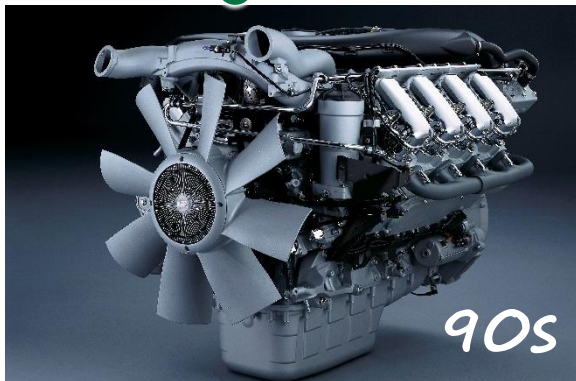
Christer Lundh

Senior Leader on “Keep it Simple” Mission

Owner and Consultant AUFERO AB

Work embedded, servant and transformational, helping leaders and teams to succeed with Agile and Lean Product Development.

Lean and Agile Product Development



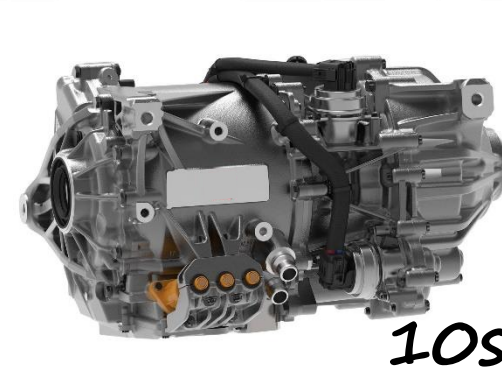
Internal Combustion Engines



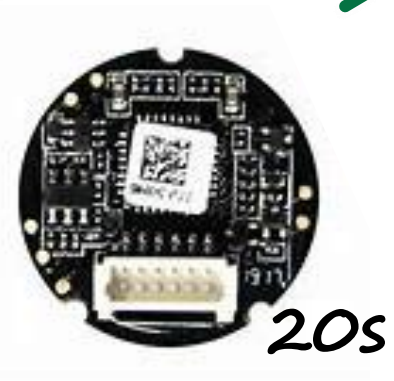
Gear shifters



Power Electronics



Electric Motors



IoT Sensor



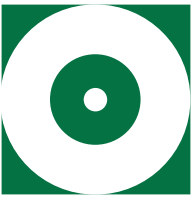
The attribute of exceptional leaders.
They take absolute ownership

– **Extreme Ownership** –

not just of what are their responsibilities, but
for everything that impacts their mission.

”No Bad Teams, Only Bad Leaders”





Tell
people
WHY
and give
people
VISION!



TELLING PEOPLE : WHAT TO DO!

Build and Lead Teams – Collaboration Has Explosive Upsides



*Command
& Control*

*Push
Detailed
Tasks*



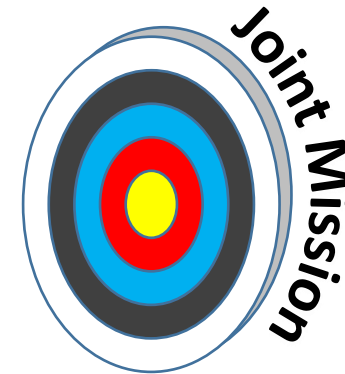
Individuals

Micro management

Teams

Missions

*Pull
Intent*

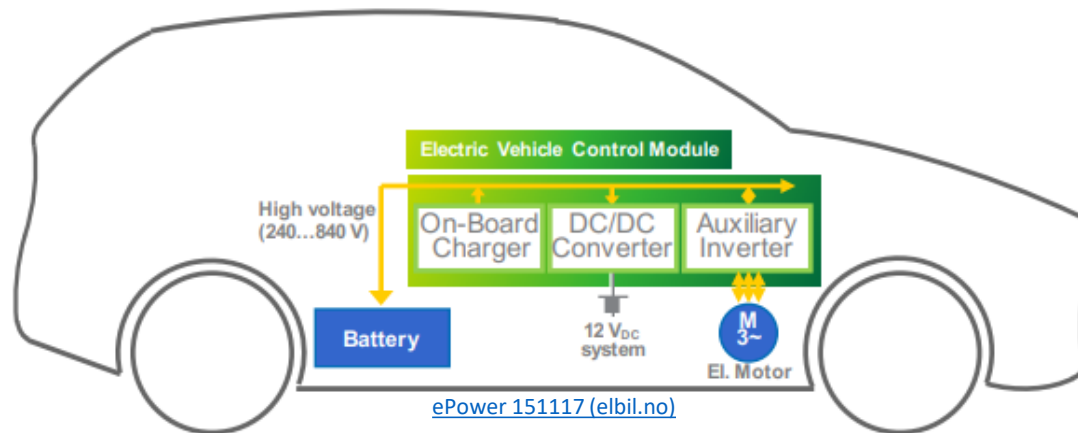


Missions Tactic

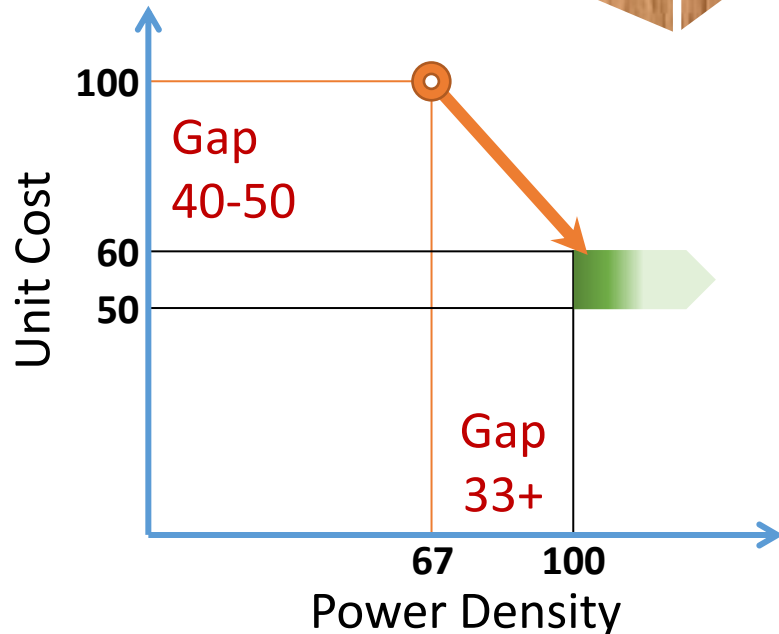
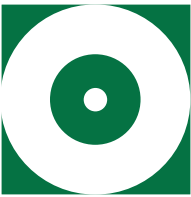
Simplicity – Intent



“To develop a platform of On-Board Chargers;
Reliant,
Easy to Install and
within Unit Cost Target.”



Understand – Teamwork – Decentralized Command



Reliable

- ▶ Eliminate risk of coolant water leakage

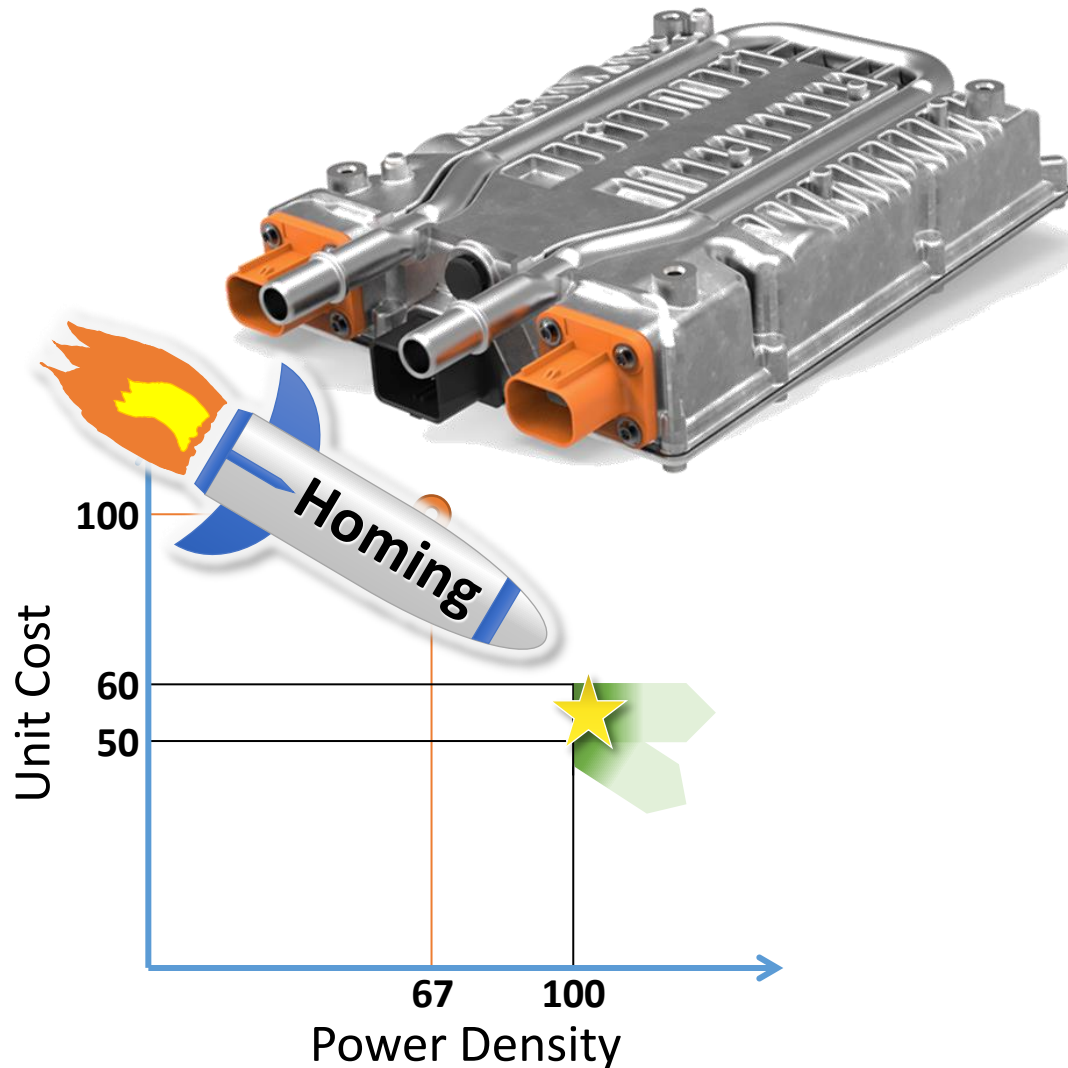
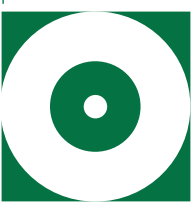
Easy to Install

- ▶ Power density 67 → 100+ **Gap 33+** (size)
- ▶ To fit all interface connections on a short side

Unit Cost Target Range

- ▶ Unit cost 100 → 60–50 **Gap 40–50**

Believe – Prioritize & Execute

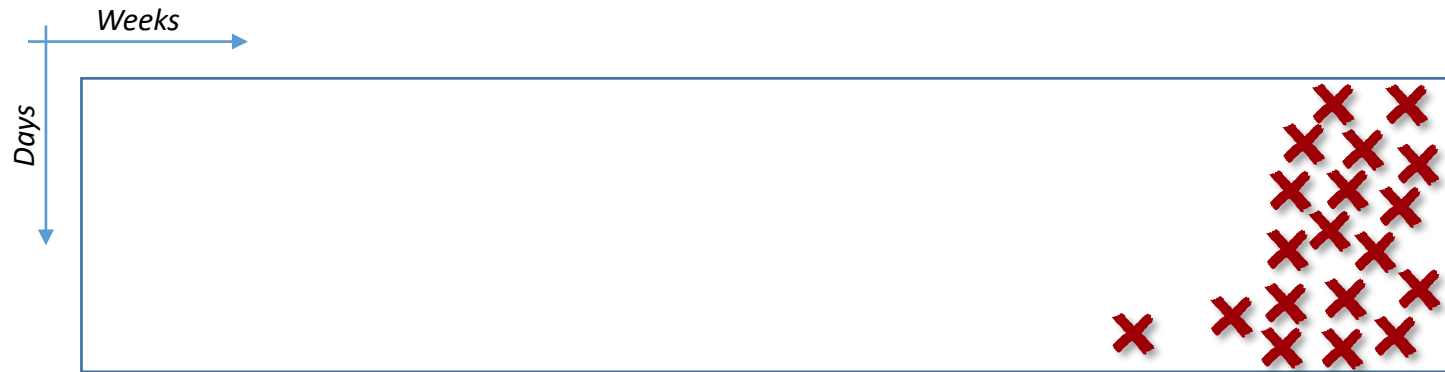
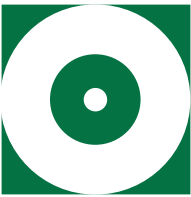


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- ★ **The worlds smallest** (kW/dm³)!
- ★ All interface connections on the short side!
- ★ Eliminated risk of coolant water leakage!
- ★ Multiple sets / options inside the target range of the unit cost!

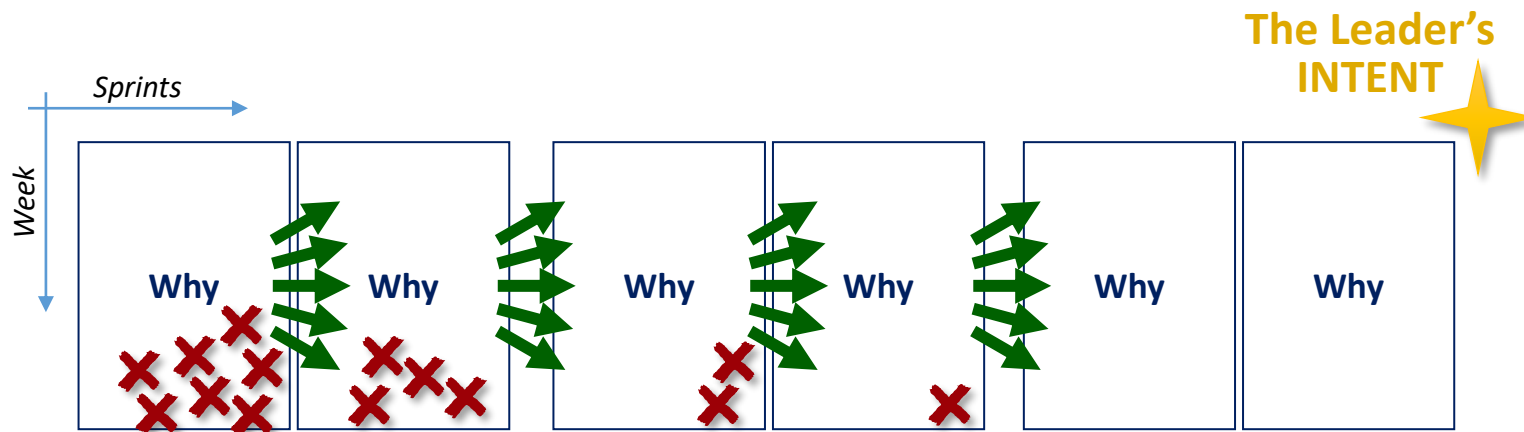
"The empowered team delivered on the intent through a massive number of initiatives at high speed"

Ownership for Mistakes & Failures



Shattered work.

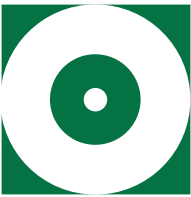
The errors pile up
at the right end.



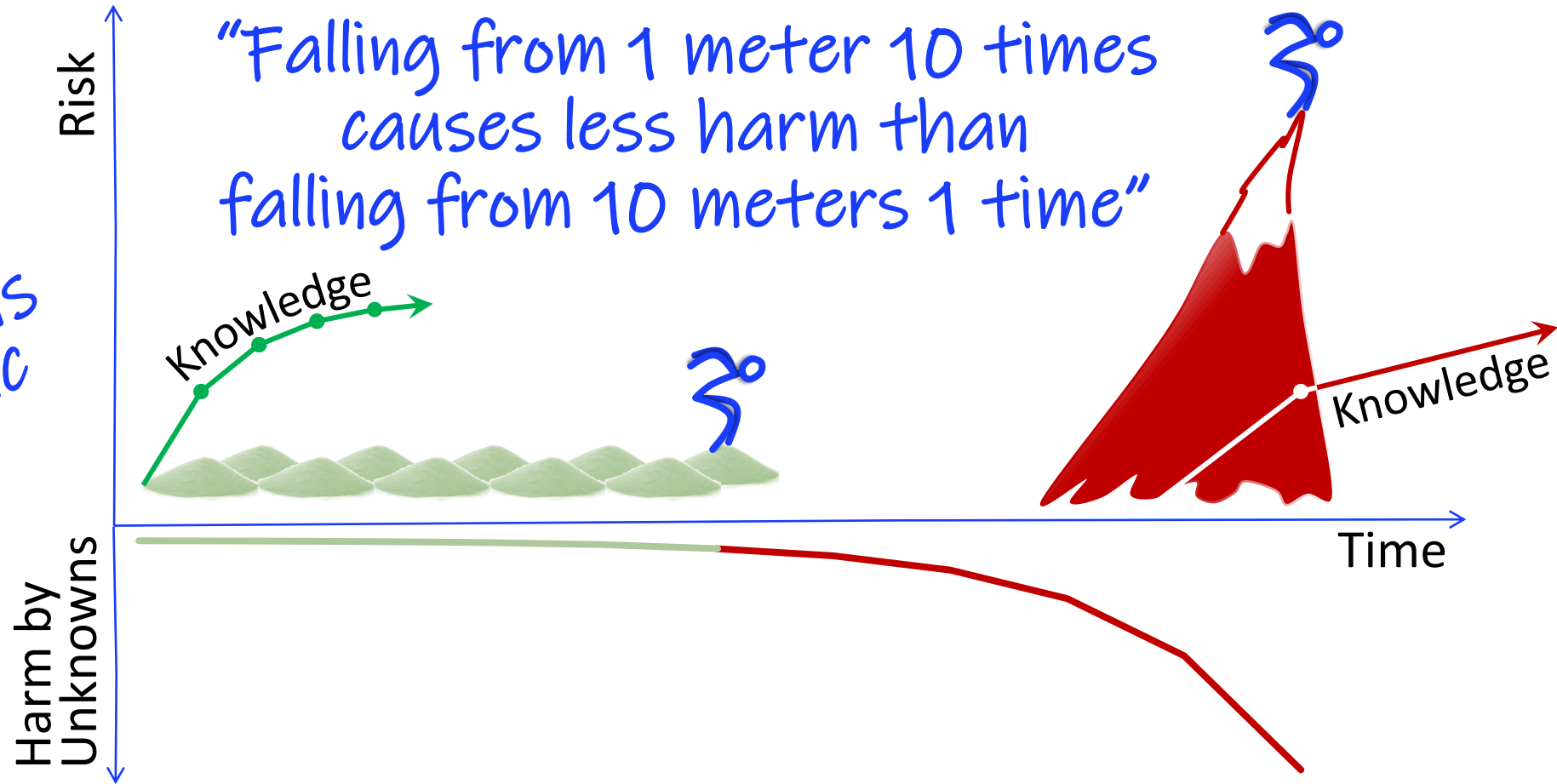
Finished missions.

Creating options
as outcomes.





Missions
Tactic



"Vary Parameters in Multiple Small Trials"

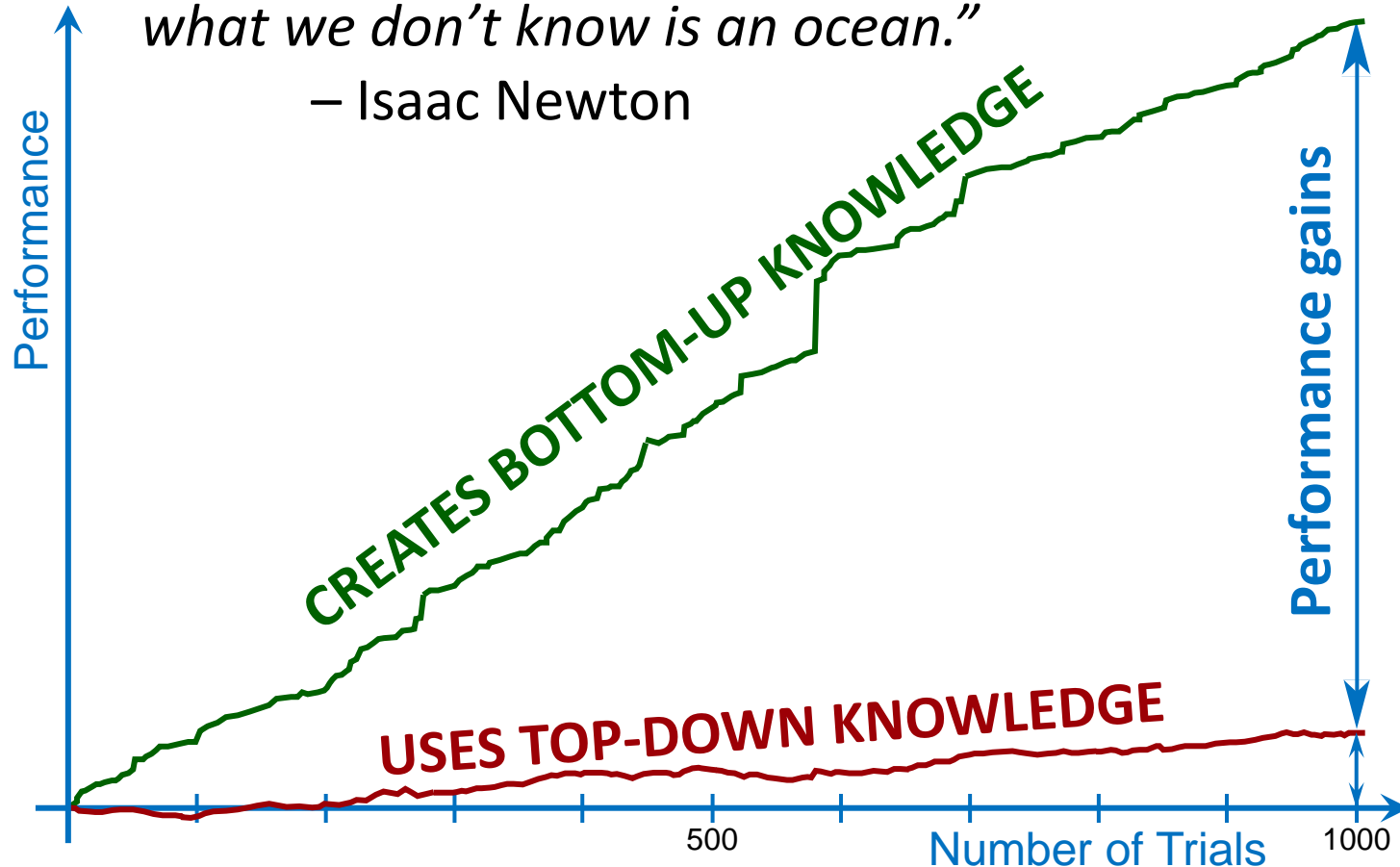
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"Larger risk and slower feedback"

'Trials with Small Errors' Outperforms 'Theoretical Knowledge'



*"What we know is a drop,
what we don't know is an ocean."*
– Isaac Newton



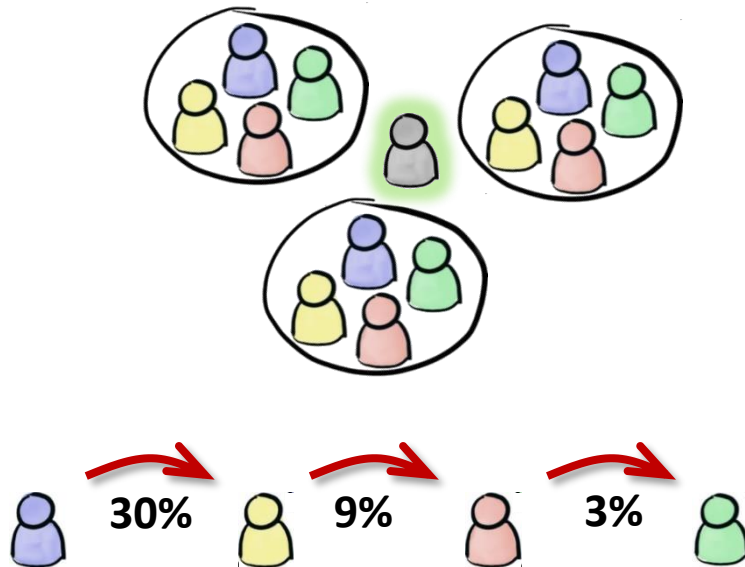
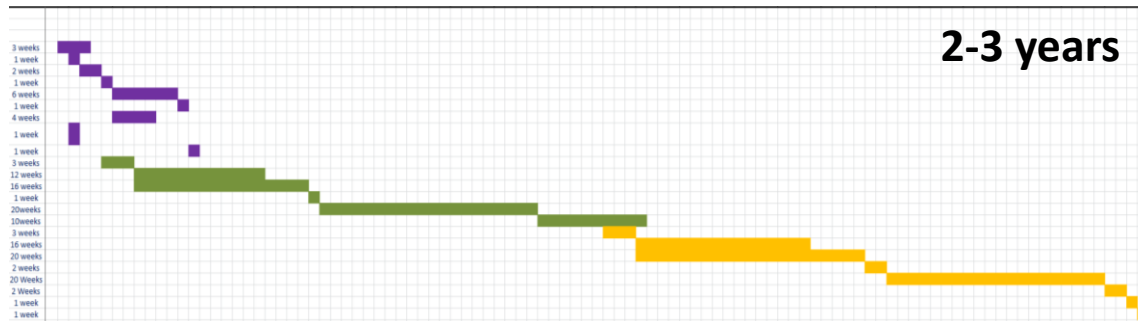
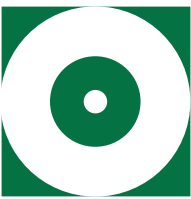
**Trials with
small errors
(iterations)**

➡ **Optionality !!**

**Theoretical
knowledge**

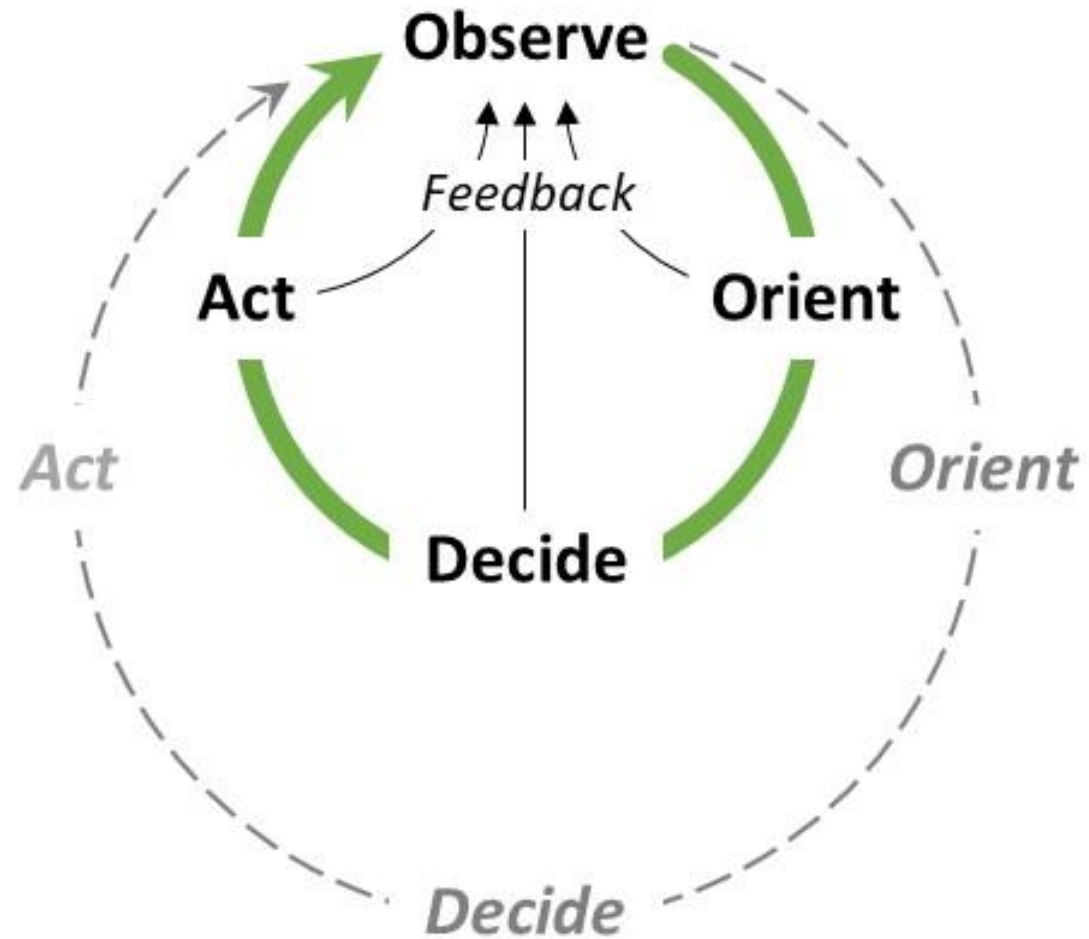
➡ **Everything is
PLANNED !!**

Develop Solutions & Solve Problems

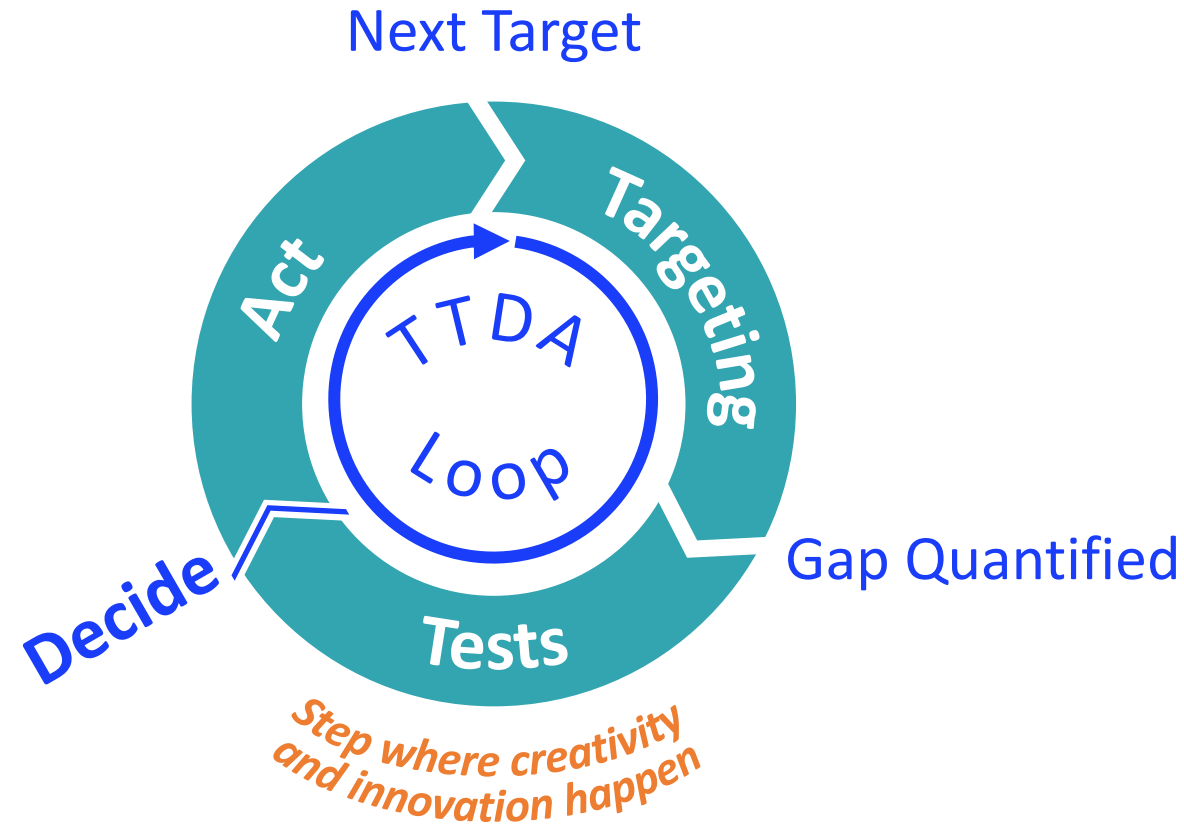


- ▶ Multiple year **project budgets** (Finance rule):
 - Head count >> Customer collaboration
 - Decision cramp
 - Arbitrary objectives
- ▶ Absence of mutual **trust** (fear culture).
- ▶ Leaders to act as the trainers for their teams, since teams constantly learn by doing – **On the Job Training** (OJT). Small errors are sources for improvements.
- ▶ **Distance**, absence of direct communication, between customers and designers.

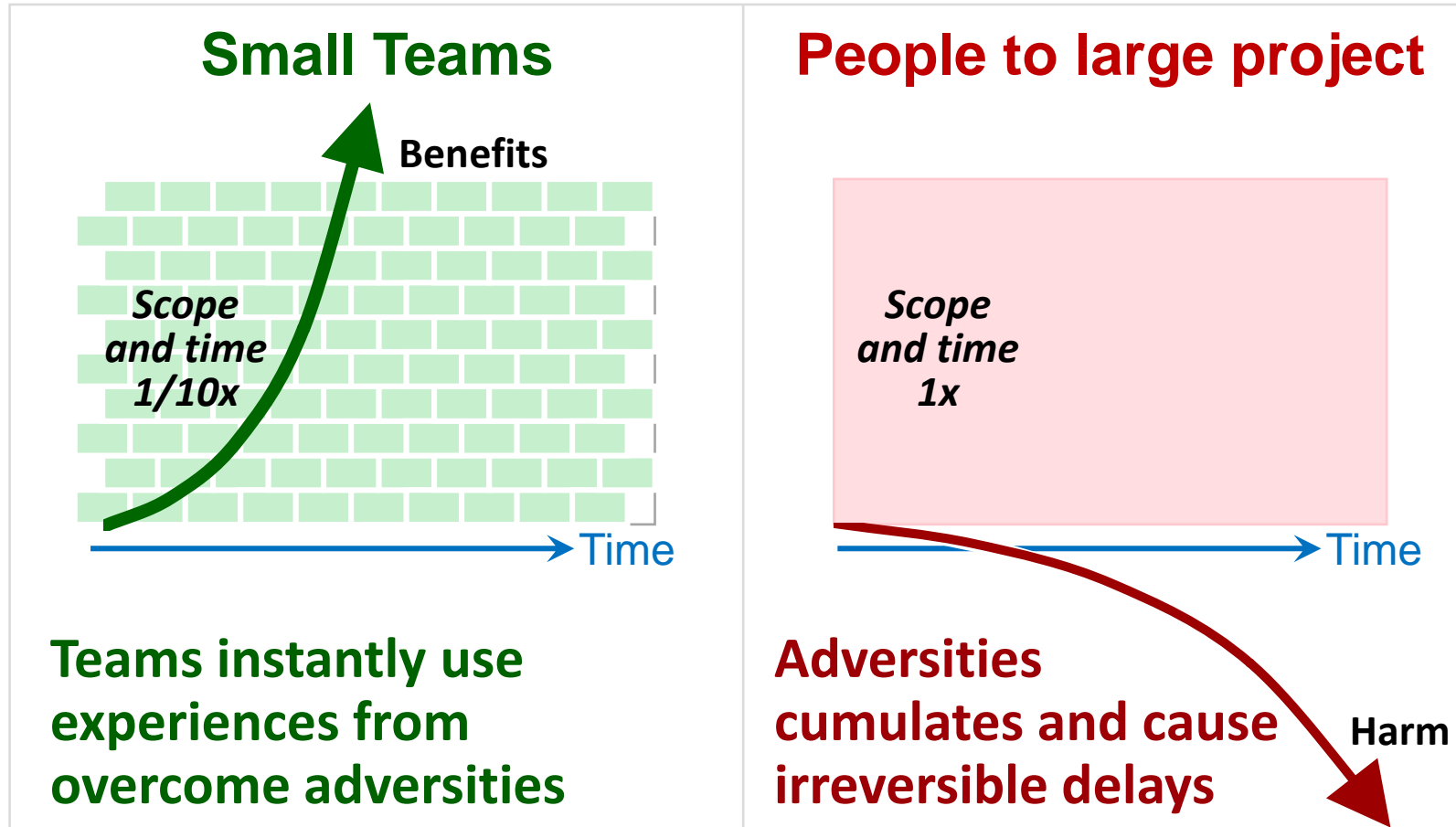
Decision Making (OODA-Loop Maneuvering)



Team's Problem Solving 'Loop' – Repeated Infinitely



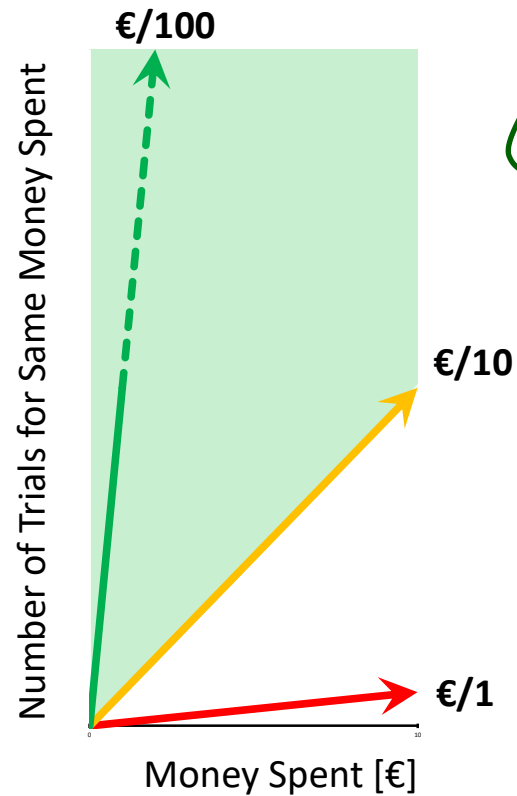
It's Not What You Preach, It's What You Tolerate





What Do the Innovators with the Highest PACE OF INNOVATION Have in Common?

Thomas Edison, SpaceX, Tesla



- ✓ Exceptional Leadership – **EXTREME OWNERSHIP**
- ✓ Radically improved **PAYOFF FUNCTION** for testing, experimenting and learning, also on hardware (€/10+)
- ✓ **FEEDBACK CYCLES** of just hours or days (€/100+)
- ✓ Benefits, creating **OPTIONS** from **TRIALS WITH SMALL ERRORS**



“You Can Be That Extreme Ownership Leader”



Thank You