



# **Extreme Ownership for LPPD Teams.**

**“The Principles of Effective Leadership”**

# Objectives with Today's Mini-Workshop

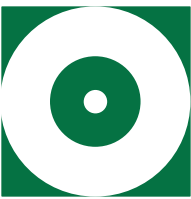


## Focus on Extreme Ownership:

- ▶ Understand the idea behind (Why).
- ▶ 'Why & Vision' over 'What'
- ▶ Vs. leadership style and teamwork.
- ▶ Vs. risk mitigation.
- ▶ Vs. Lean/ Agile (LPPD).



*What Extreme Ownership  
means to leaders and teams*



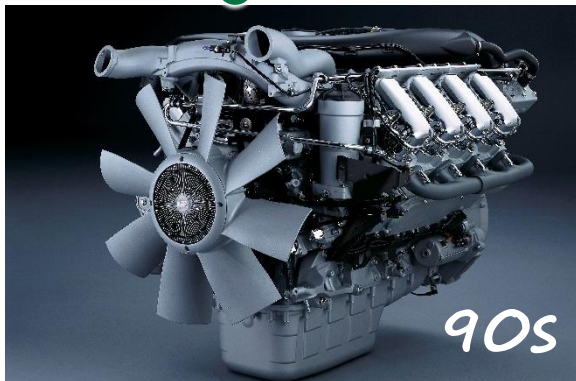
## Christer Lundh

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 Development*



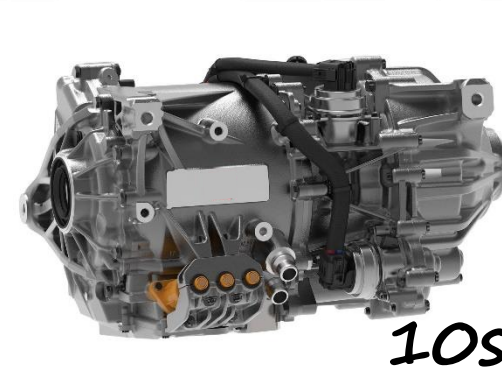
Internal Combustion Engines



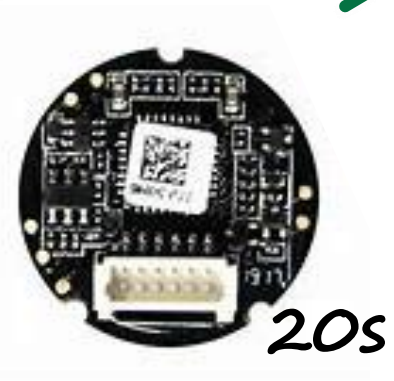
Gear shifters



Power Electronics



Electric Motors



IoT Sensor



# Customer

# EXPERIENCE





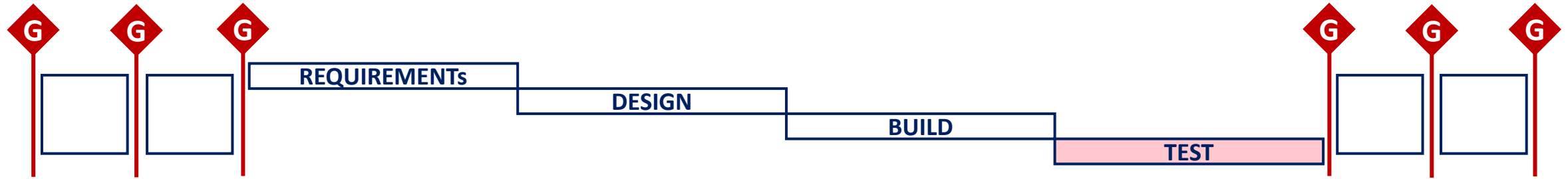
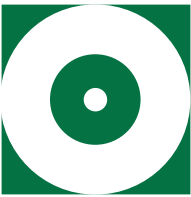


The attribute of exceptional leaders.  
They take absolute ownership

– Extreme Ownership –

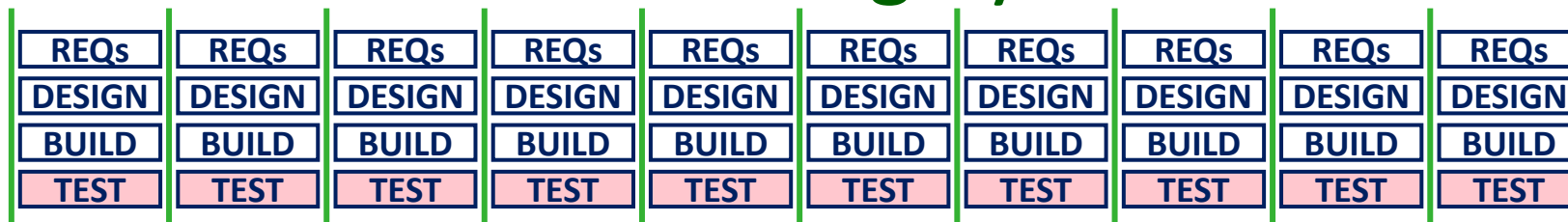
not just of what are their responsibilities, but  
for everything that impacts their mission.

# Two Major Paradigms



**Process Compliance** (*Resource Utilization*)

10x Learning Cycles

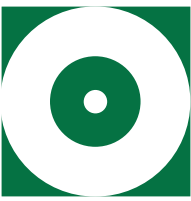


**Knowledge Based a.k.a. Lean/ Agile** (*Continuous Flow*)

# Lean Product and Process Development

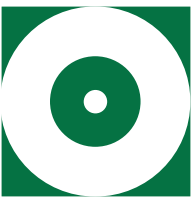






# **EXTREME OWNERSHIP.** Leaders Must Own Everything in Their World. There Is No One Else To Blame.

- ▶ It's all about the **TEAMS** – “No bad teams, only bad leaders.”
- ▶ Great leaders take ownership for **MISTAKES** and **FAILURES**, admit mistakes, develop solutions and solve problems.
- ▶ Taking Extreme Ownership, great leaders **CHECK THEIR EGO.**
- ▶ Great leaders don't tell people what to do. They provide the **WHY** and the **VISION** – their **INTENT**.
- ▶ **SIMPLE** – minimize complexity (compounds). Complex plans add to confusion. Simple plans, everyone **UNDERSTANDS**.



# **EXTREME OWNERSHIP.** Leaders Must Own Everything in Their World. There Is No One Else To Blame.

- ▶ Individuals of teams must **BELIEVE** in the cause, the plan and trust their leader.
- ▶ Teams must ask until they **UNDERSTAND**. They must get it.
- ▶ **TEAMWORK** – leadership the single greatest reason behind success of any team.
- ▶ Leaders **PRIORITIZE**, teams understand and **EXECUTE**.
- ▶ **DECENTRALIZED COMMAND**, use **INTENT** (Why), then teams adjusts to challenges and changes and take initiatives.




# EXTREME OWNERSHIP

## - WHY! -

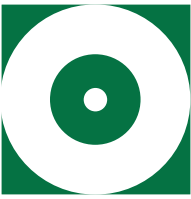
# Extreme Ownership in Brief – **Why** Extreme Ownership



- ▶ Lean/ Agile is conversation and **COLLABORATION** based.
- ▶ Organizations need **AGILITY**. It's up to the Senior Leaders if that shall be realized!
- ▶ Agility require good **CONTINUOUS FLOW** – major lean principle.
- ▶ Everyone can pivot fast (hour–days) on events:
  - + Emerged **PROBLEMS** or → *small @ beginning* 
  - + Identified **OPPORTUNITIES** → *very short window*

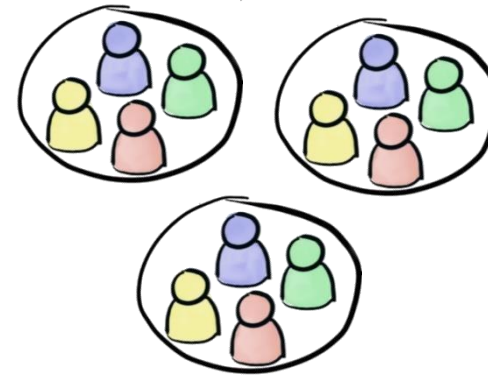


# Extreme Ownership in Brief – **Why** Extreme Ownership



Chief Engineers  
**INTENT (Why)**

- ▶ Teams are busy.
- ▶ Teams can't make the transformation and take Extreme Ownership of their assignments and improvement work instead ...
- ▶ The Senior Leadership level must take **EXTREME OWNERSHIP** phrase **WHY** and serve teams.



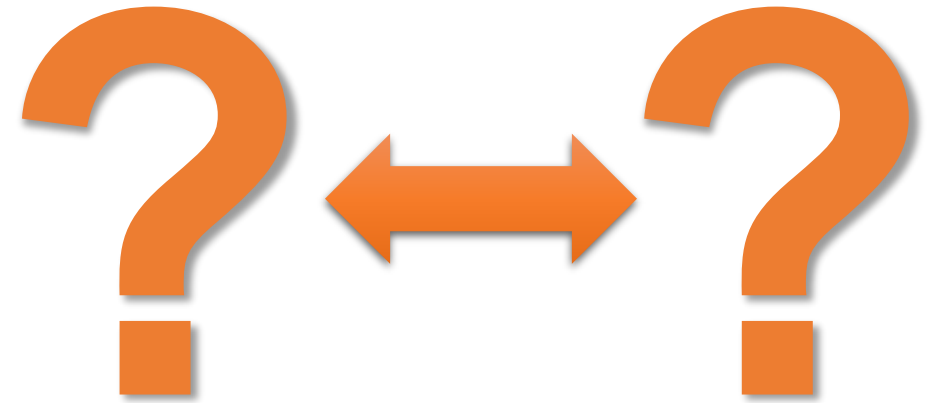


# Extreme Ownership in Brief – **Why** Extreme Ownership



## What it means to leaders:

- ▶ If the leader can't understand Why.
- ▶ He/she won't get their teams to understand and execute as intended either.



# Extreme Ownership in Brief – **Why** Extreme Ownership



## What it means to teams:

- ▶ If the individuals on a team can't understand Why.
- ▶ They won't know how to act when the situation change.

In the new age we're living in of Cloud, Partnership, Platforms, Networks, Ecosystems and Collaboration:

— **No Agility, No Pivot,**  
**i.e. No Digital/ Culture Transformation**



# EXTREME OWNERSHIP - LEADERSHIP -

”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*

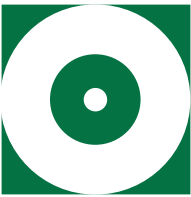
# “It’s Not What You Preach, It’s What You Tolerate.”



- ▶ Setting the standards.
- ▶ If substandard performance is accepted and no one is held accountable – no consequences – that poor performance becomes the new standard.
- ▶ Leaders must push the standards, encourages and enables the Teams to utilize Extreme Ownership.
- ▶ Teams push the new better standard.



# The Leader Is Both **the Leader & the Trainer**



- ▶ Teams to become 'Teams of Experts.'
- ▶ The leader participate in their Teams on the job training.  
Leaders don't know best.  
They're also continuously learning.
- ▶ **A good leader:**  
a nudger, inclusive, supportive and inquisitive, and learn from mistakes.
- ▶ No one is perfect!



Dec. 2018 to May 2021 (29 months).  
SpaceX built and tested 18 prototypes.

*Flow of tests is superior when  
prototype cost, set-up time and  
queue time are greatly reduced.*

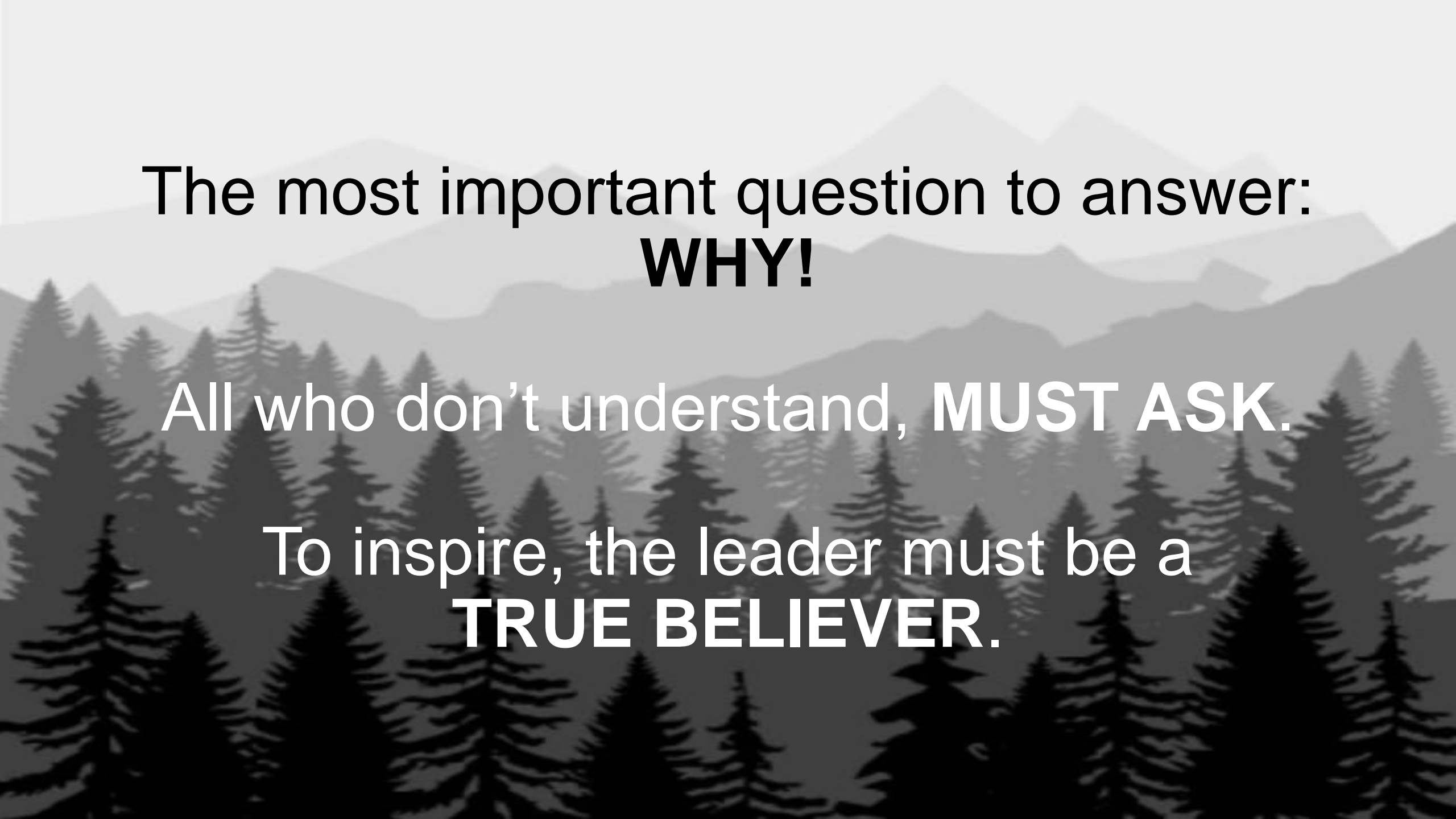


# Why & Vision >> What *“Commanders Intent”*



- ▶ Free creativity.
- ▶ Teams takes initiatives.
- ▶ Rapid decision-making + where the future unfolds.
- ▶ Harvest optionality – when opportunities arise.





The most important question to answer:  
**WHY!**

All who don't understand, **MUST ASK.**

To inspire, the leader must be a  
**TRUE BELIEVER.**



# Huge Difference of the Leader Role – Push Vs. Pull



## Does 'Batch And Queue' Set Up, Force Push Management? **Yes!**

*I.e. When Everything Is Started, Ongoing,  
Managers Are Forced To Push Trying To Gain  
Control.*

- Try to get **Control** and used to **Command**
- Everything is started (ongoing) – **large WIP**
- **Managers Push** against deadlines, that usually are missed
- **Invisibility**, cannot see current conditions e.g. difficult to see queues, congestions, and state of occupancy. Difficult to have an overview to make the best trade-offs.
- People are **stressed and get demotivated**

## Does 'Flow' Set Up, Pave Way For Pull Leadership? **Yes!**

*I.e. When Creating Visible Flow, And Limit Work In  
Process, Managers Can Start To Pull Aiming At  
Targets.*

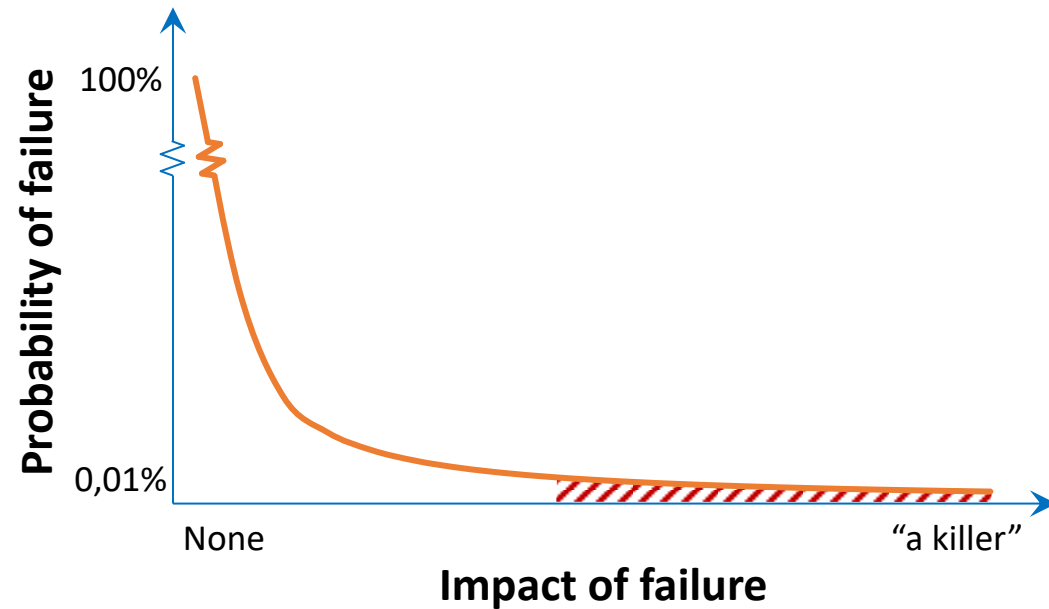
- + **Listen and Support**, remove obstacles
- + WIP constraints – **small WIP**
- + **Leaders Pull** aiming at targets that usually are met
- + **Transparency**, see current conditions e.g. see queues, congestions, and state of occupancy. Have overview and makes in-real time priorities.
- + People are **committed and responsible**



# EXTREME OWNERSHIP - RISK MITIGATION -



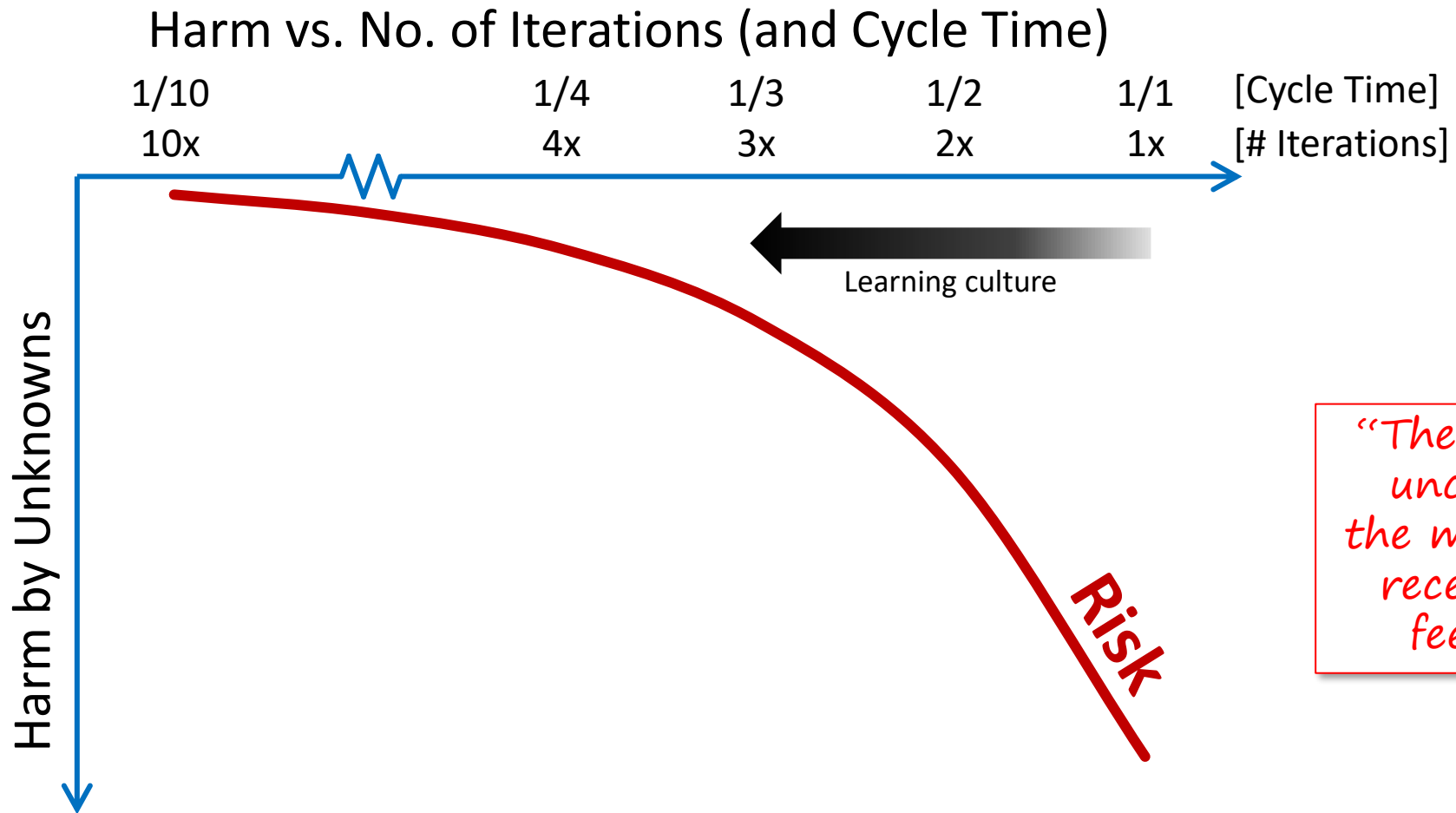
EXTREME OWNERSHIP  
- TEST EARLY & OFTEN -



## Tail Risks – High Impact of Failure – Are Very Harmful:

- The potential impact ( $f(x)$ ) always overrides probability of  $x$  the likelihood.
- The two parameters cannot be multiplied together to prioritize risk management.
- Risk mitigation – reducing the impact is more important than risk reduction (reducing likelihood).
- E.g. mitigate Impact of Delay rather than reducing Probability of Delay.
- Prioritize mitigation actions on items with large Impact ( $f(x)$ ) of Delay.

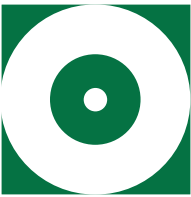
# The Development Process As We Know It Is Fragile!



“The larger the uncertainty, the more urgent receiving fast feedback!”



# How Do You Mitigate **Risks** In Your Development Activities?



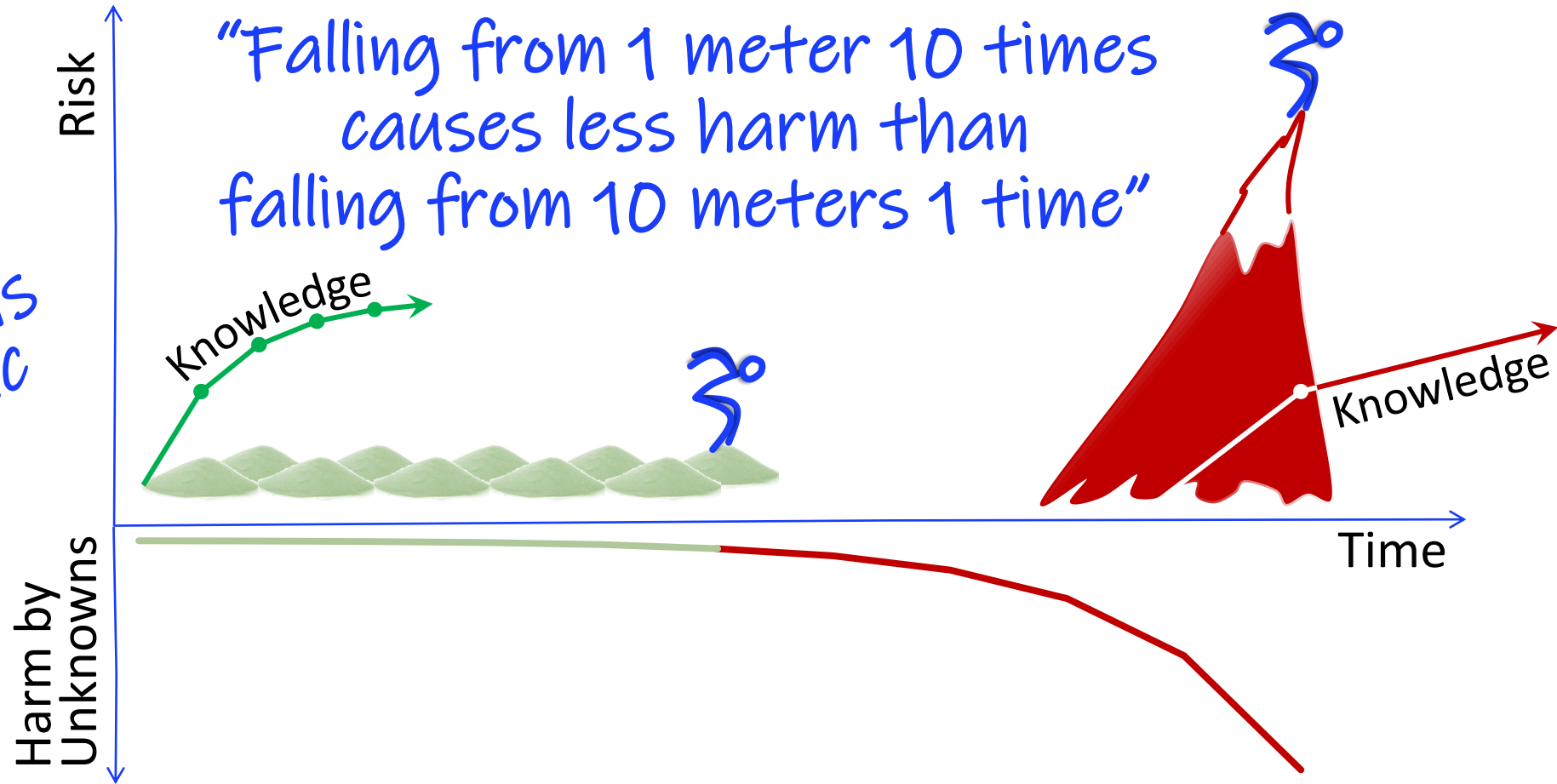
Big batch vehicle/ system testing, back-end to verify. Late detections of failure forces 'adding' to make it work.



Continuous flow of small trials. Early failures are most often small and benign, even reversible and quickly overcome. They are also rich in information. Ensures front-end 'subtracting' of what doesn't work.



Missions  
Tactic

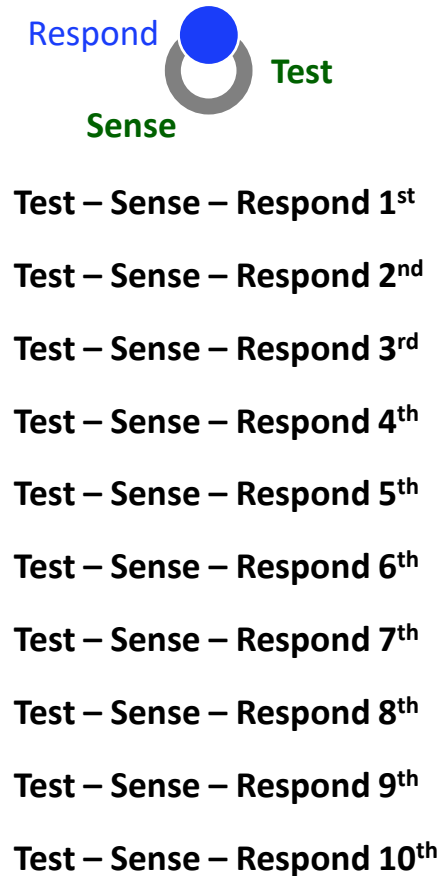
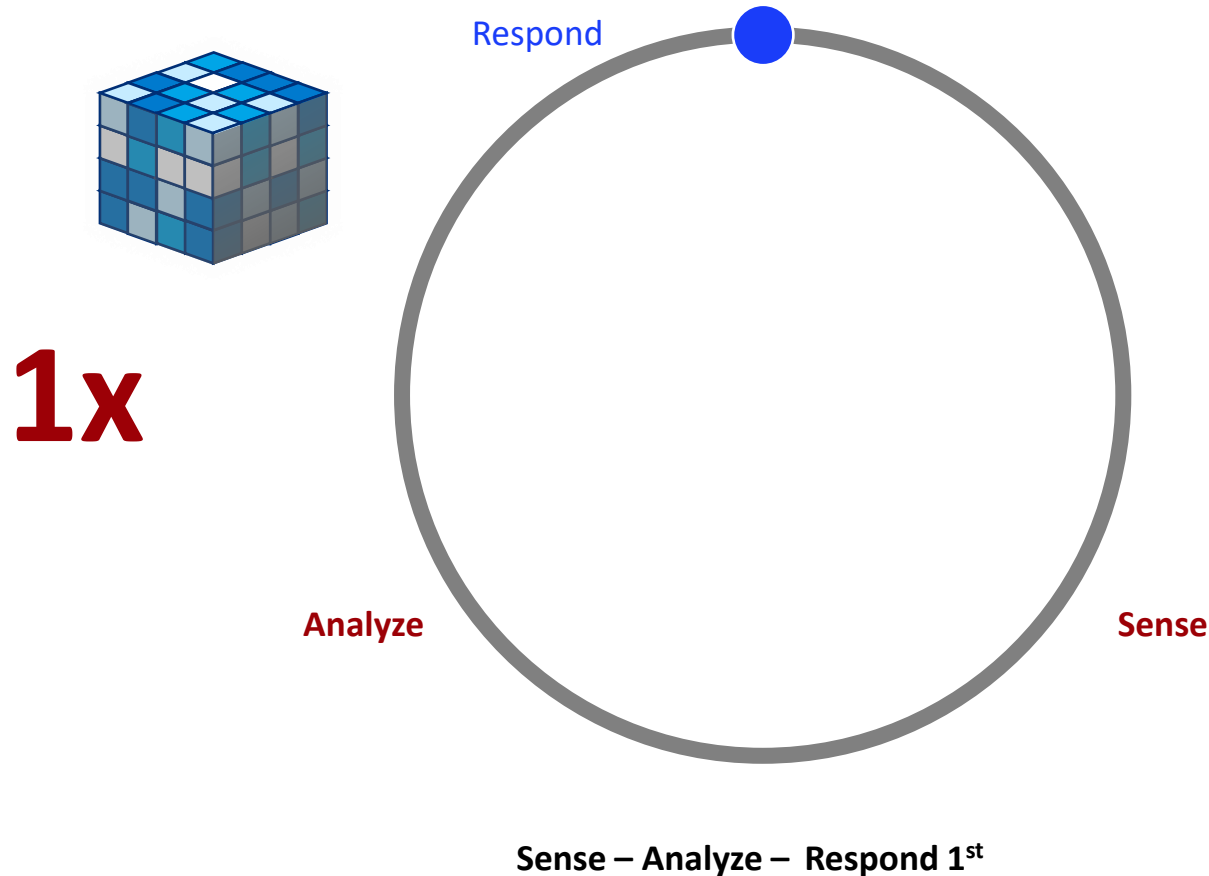
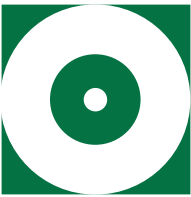


"Vary Parameters in Multiple Small Trials"

**10:1**

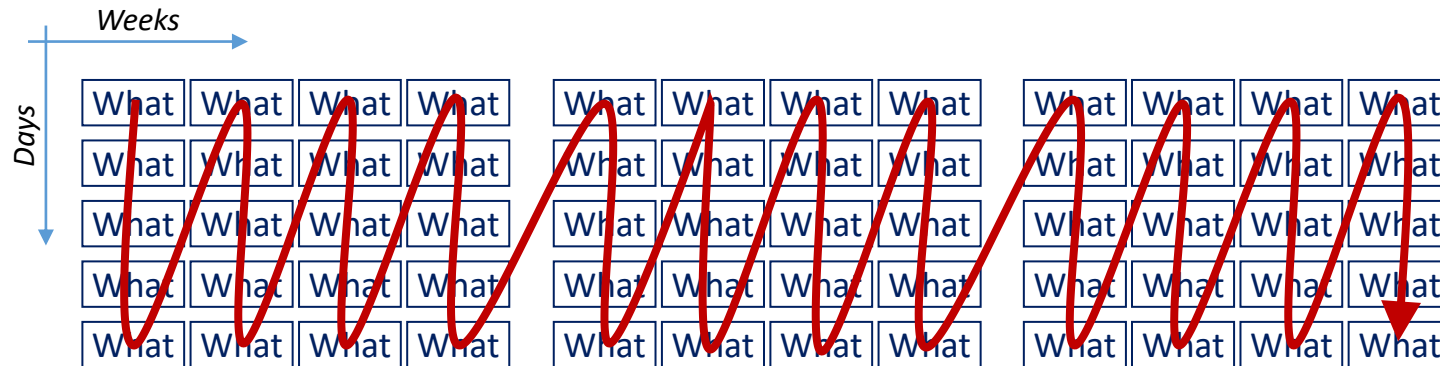
"Larger risk and slower feedback"

# Development has a **Flow** Issue

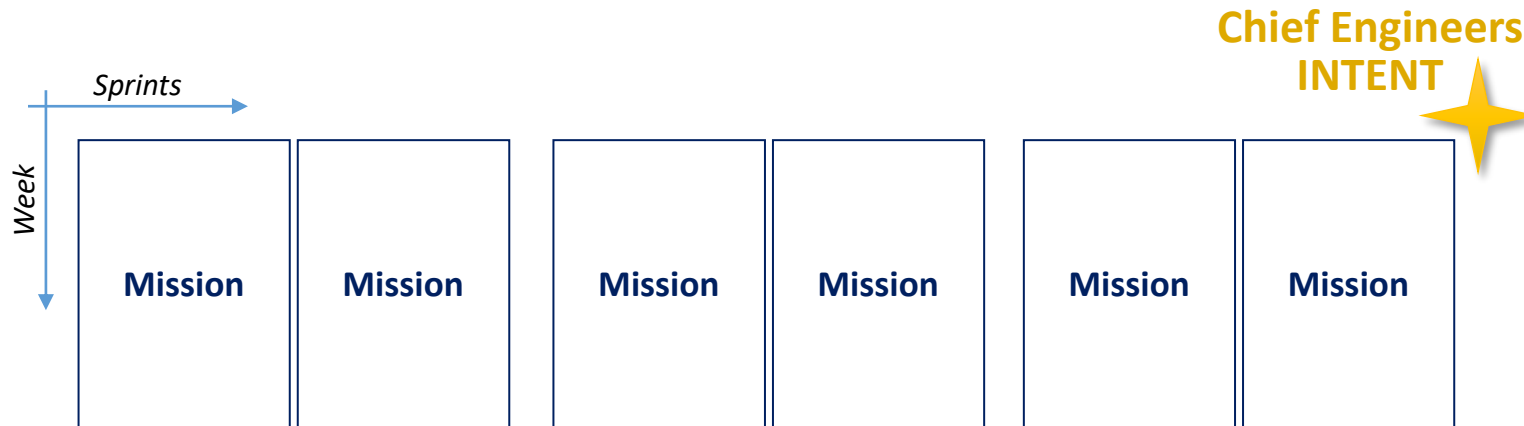


If customers matter, SPEED matters, so do flow and cadence

# Teams Overwhelmed or Win on Any Challenge

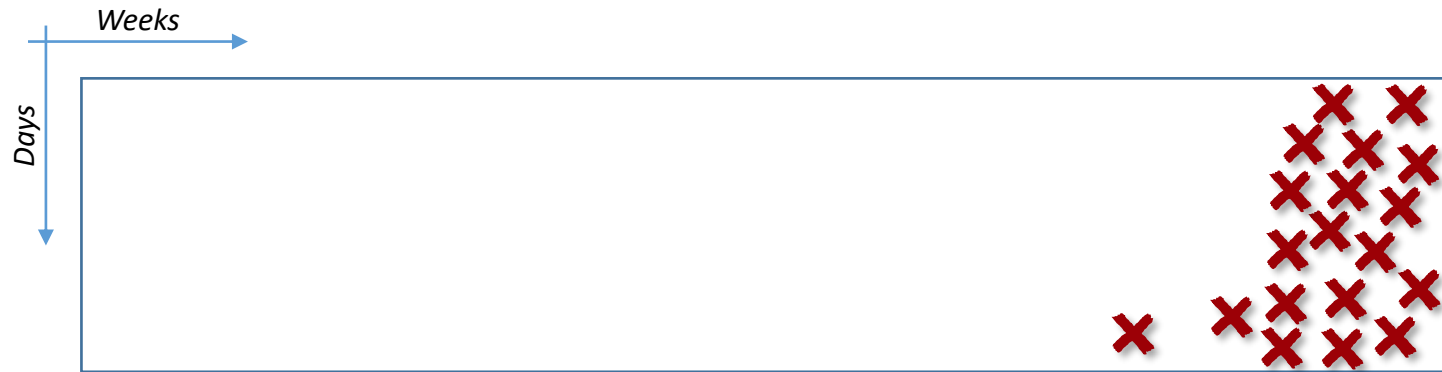


**Focus on 'What'**  
**Everything is planned.**



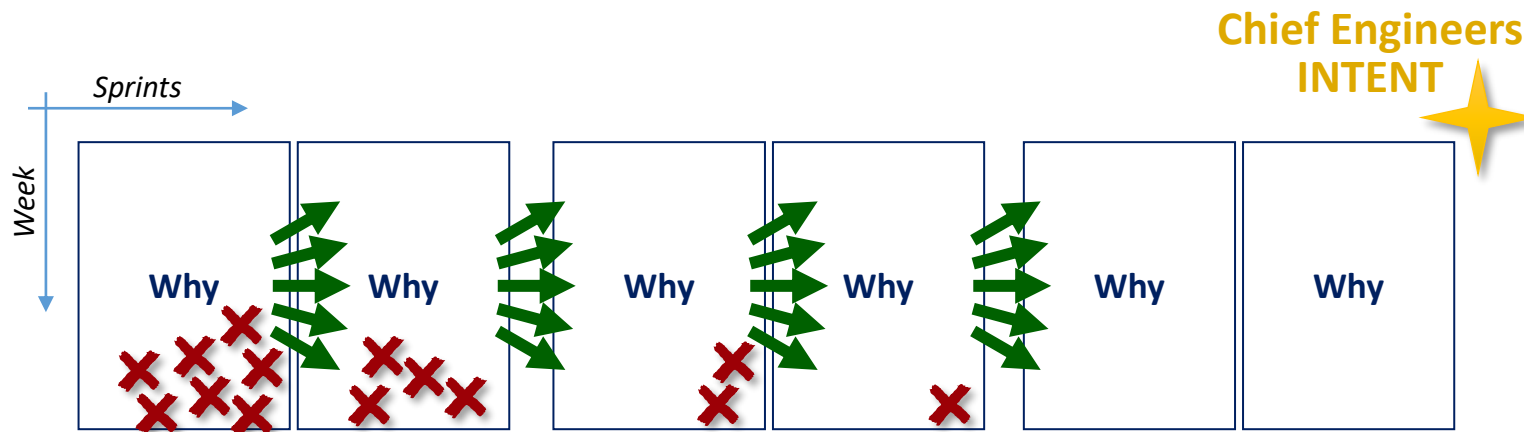
**Focus on 'Why'**  
**Trials with small errors (iterations).**

# Extreme Ownership of Mistakes & Failures



**Shattered work.**

The errors pile up  
at the right end.



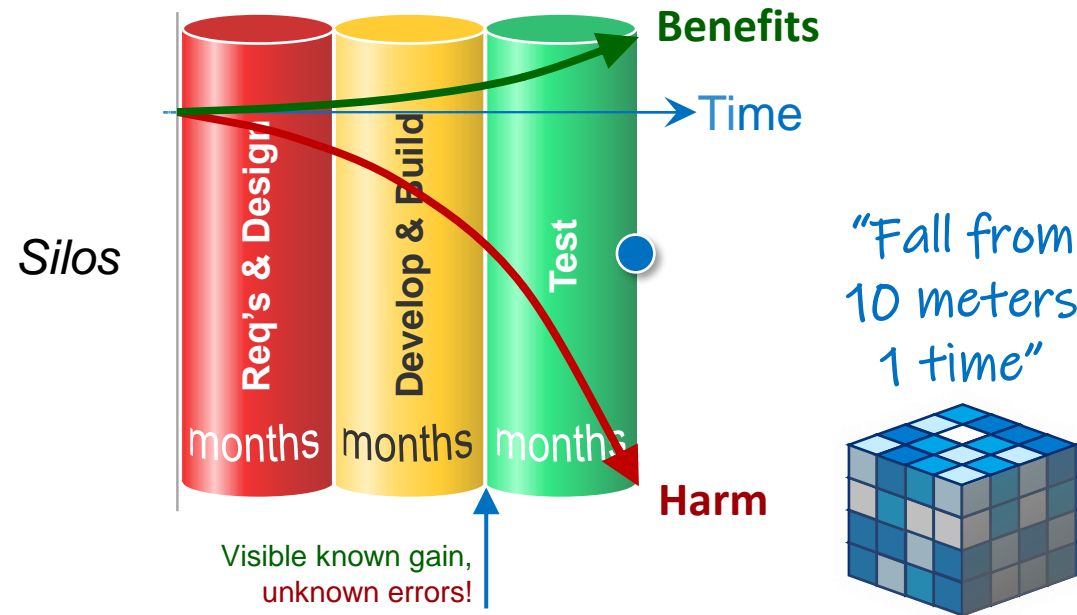
**Finished missions.**

Creating options  
as outcomes.





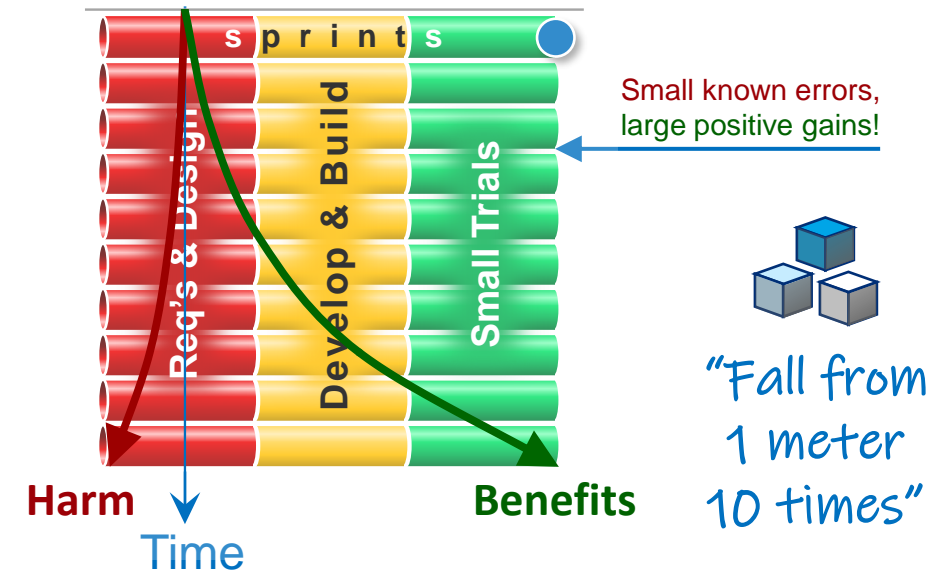
# Large Asymmetry in Difference Between Benefit and Harm



- ▶ Test to validate final product.
- ▶ The more comprehensive and late – the stronger negative asymmetry.



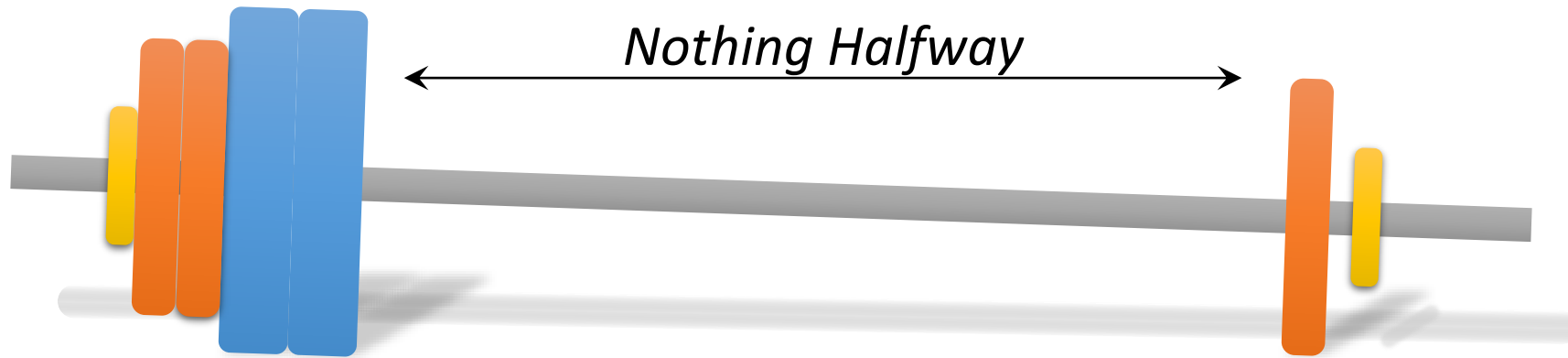
## Cross Functional Teams



- ▶ Multiple small trials, on subsets, to outer limit to solve problems and learn with customers.
- ▶ The cheaper, simpler and faster – the stronger positive asymmetry.



# Combination of Aggressiveness Plus Paranoia... ...'Teams of Experts' Protect Themselves from Extreme Harm...



## CONSERVATIVE

Everything Planned

**1-2 Learning Cycles:**

Visible Known Gain (+)

Unknown Errors (- -)

## AGGRESSIVE

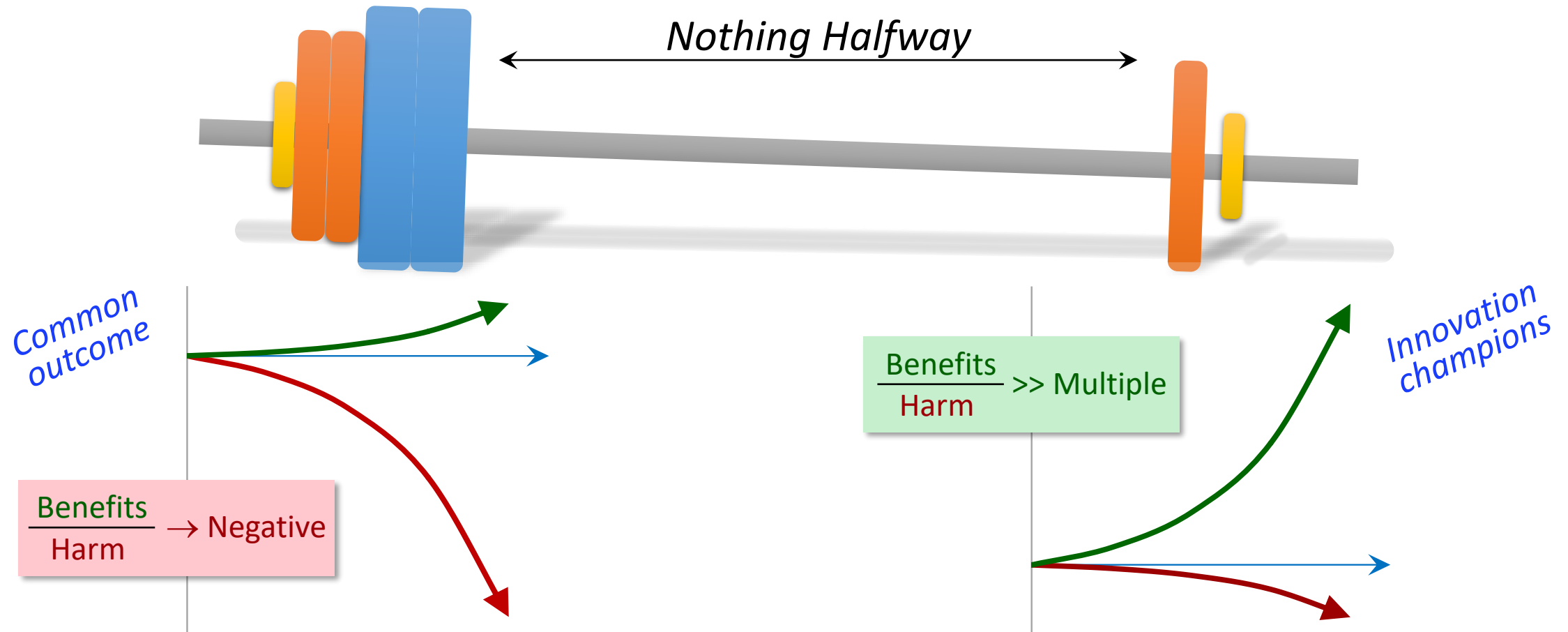
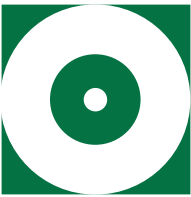
Teams Create Bottom-up Knowledge

**10–100 Learning Cycles:**

Small Known Errors (+)

Large Positive Gains (++)

# Combination of Aggressiveness Plus Paranoia... ... 'Teams of Experts' Protect Themselves from Extreme Harm... ... **And Let the Upside... Take Care of Itself**

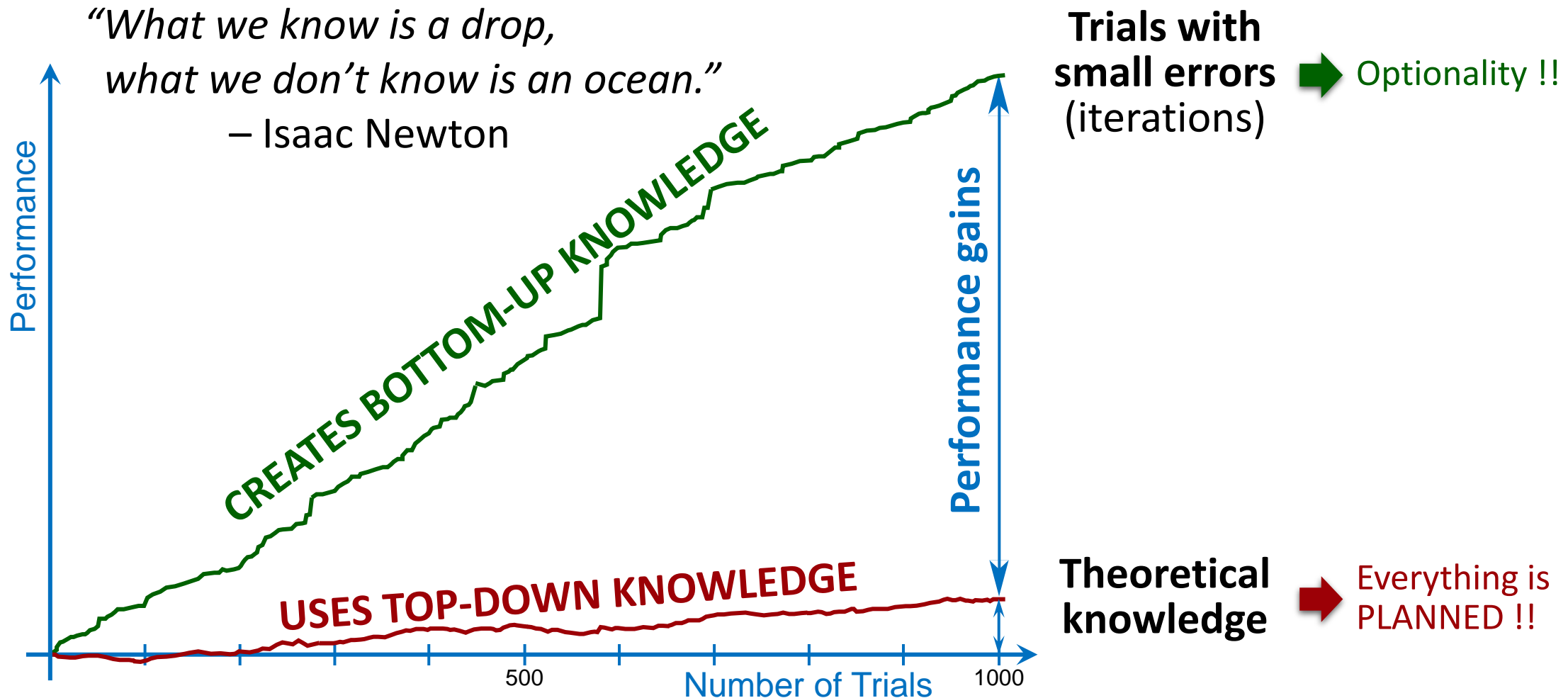




# EXTREME OWNERSHIP

## - LEAN / AGILE -

# 'Trials with Small Errors' Outperforms 'Theoretical Knowledge'

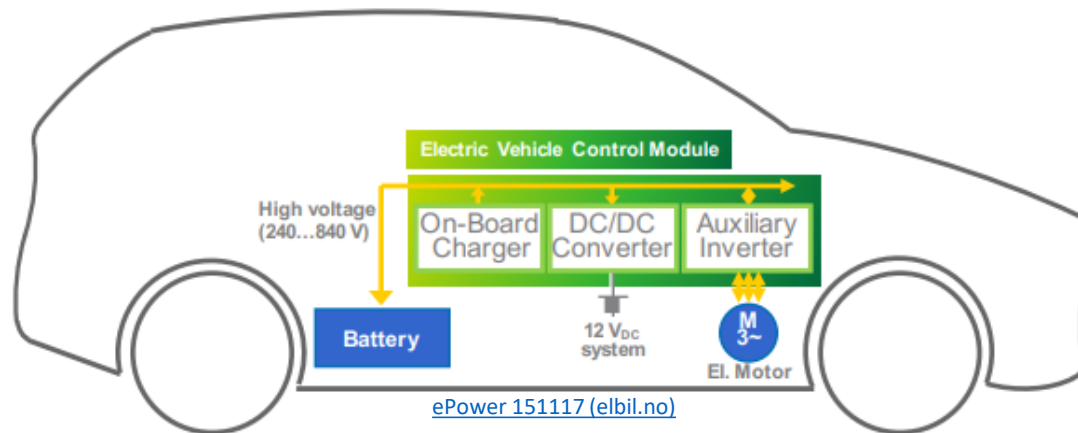




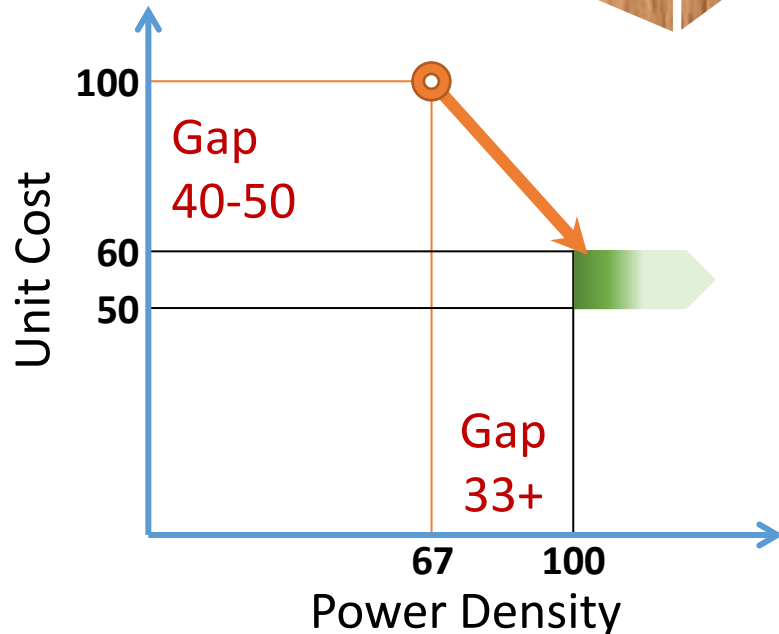
# Simplicity – Intent



“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

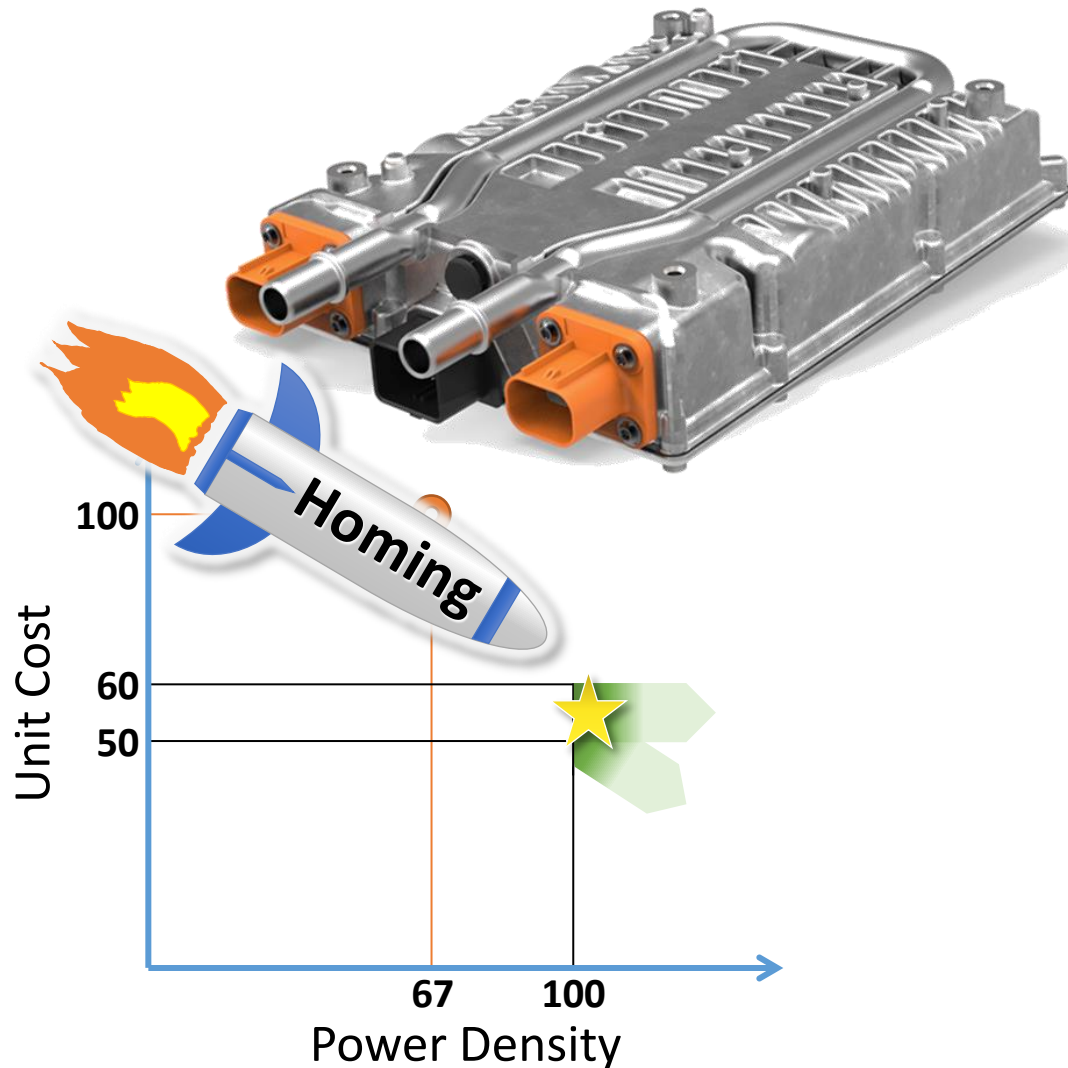
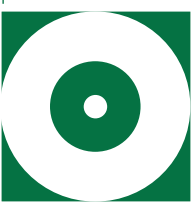
## Easy to Install

- ▶ 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

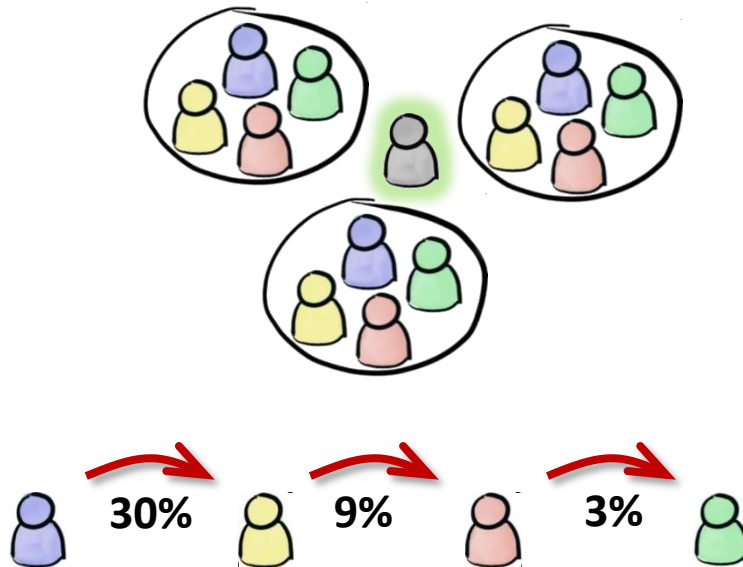
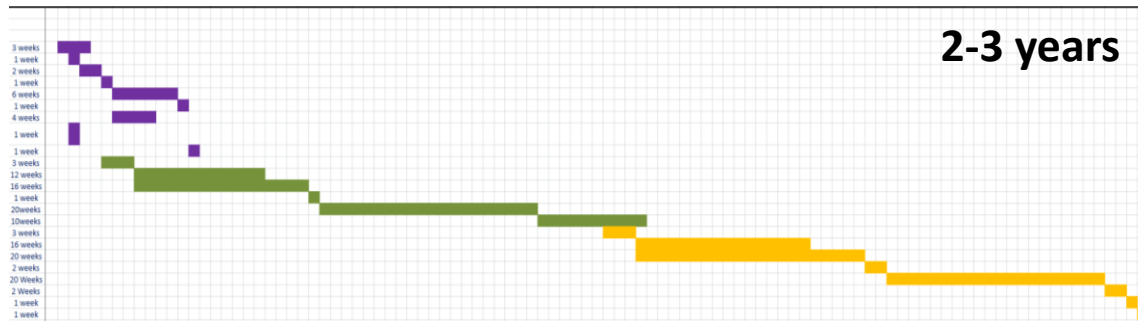


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- ★ **The worlds smallest** (kW/dm<sup>3</sup>)!
- ★ All interface connections on the short side!
- ★ Eliminated risk of coolant water leakage!
- ★ Multiple sets / options inside the target range of the unit cost!

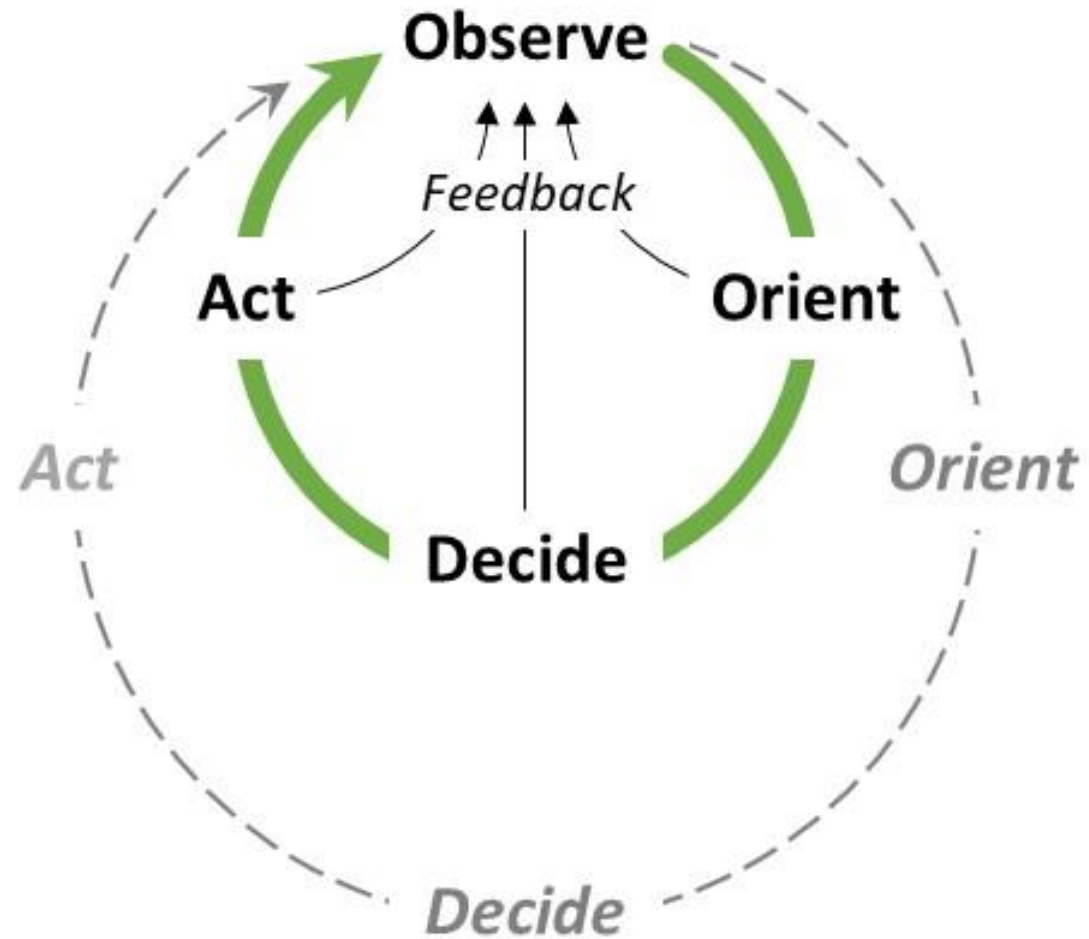
*"The empowered team delivered on the intent through a massive number of initiatives at high speed"*

# Develop Solutions & Solve Problems



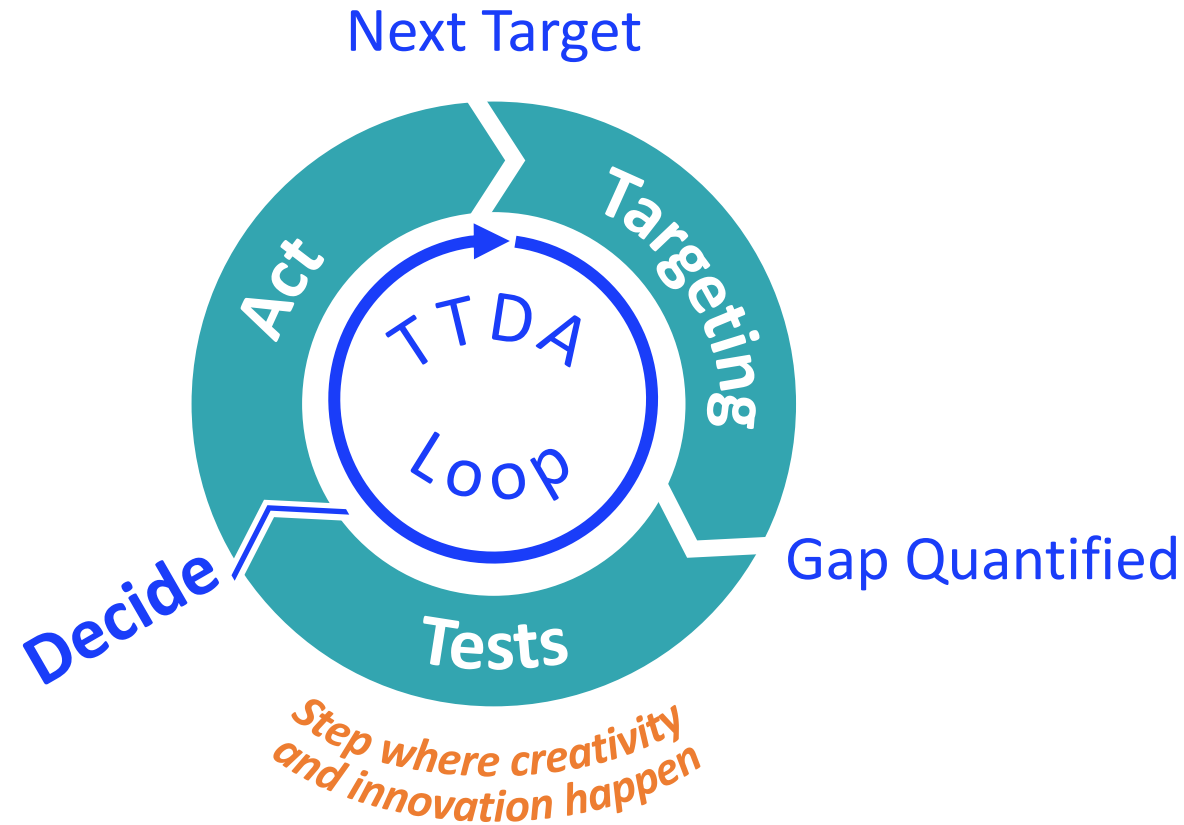
- ▶ Multiple year **project budgets** (Finance rule):
  - Head count >> Customer collaboration
  - Arbitrary objectives
  - Decision cramp
- ▶ Absence of mutual **trust** (fear culture).
- ▶ Leaders to act as the trainers for their teams, since teams constantly learn by doing – **On the Job Training**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

# Decision Making (OODA-Loop Maneuvering)

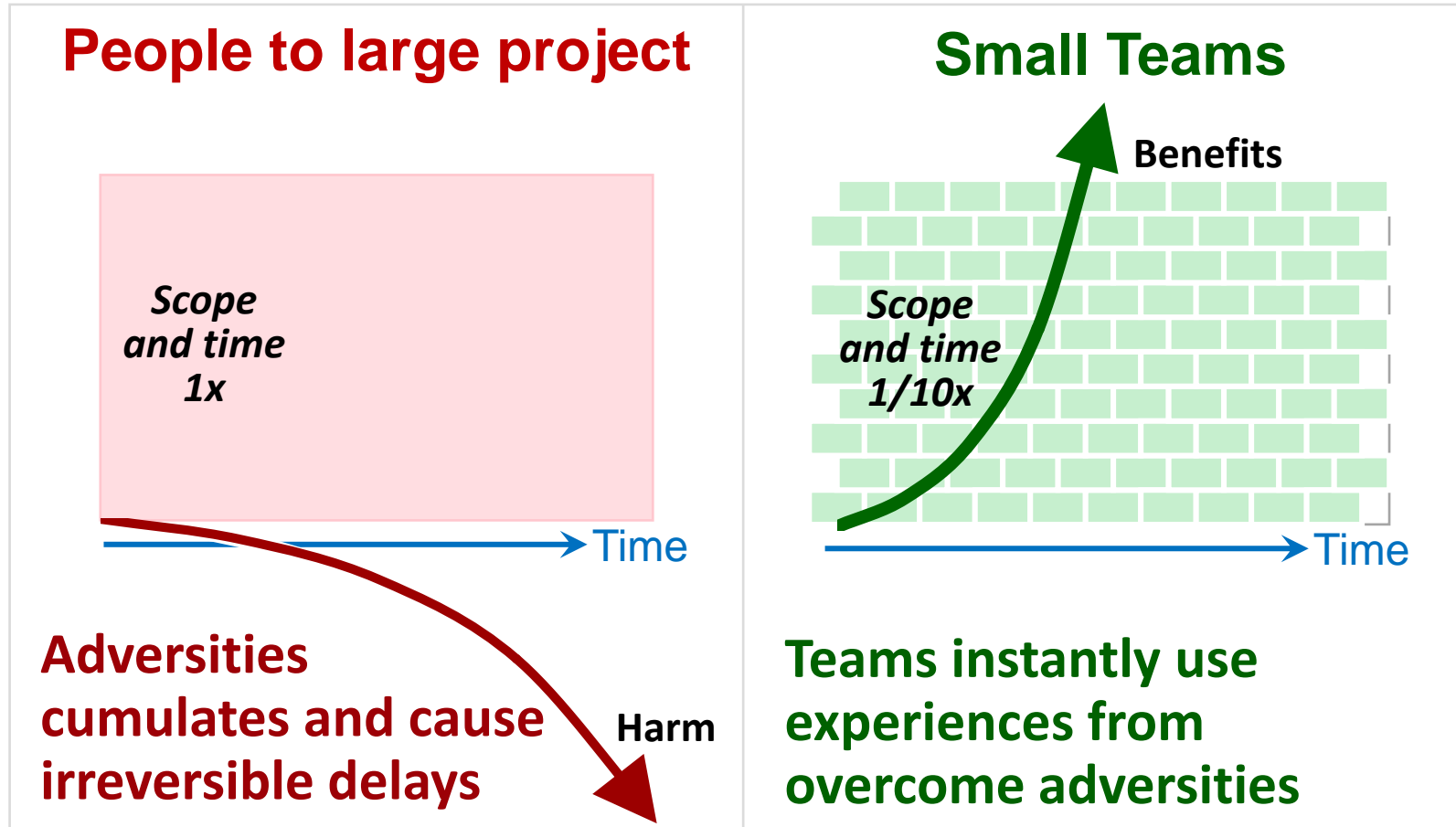




# Team's Problem Solving 'Loop' – Repeated Infinitely



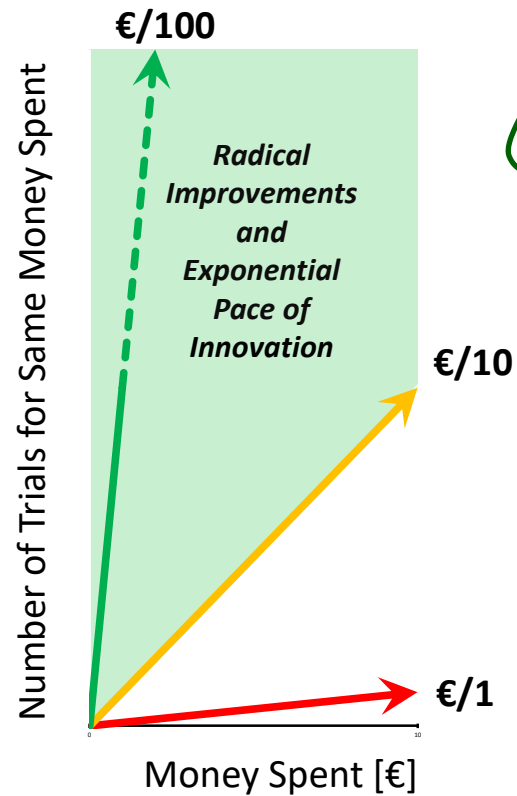
# Remember “It’s Not What You Preach, It’s What You Tolerate”





# 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