



Scaling Scrum by LeSS and SAFe

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GOSEI

Ari Tikka



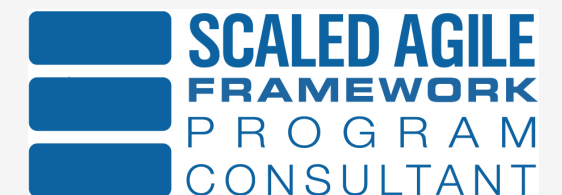
1990 Embedded real time C

1997 Large scale cultural change,
Program management, Workplace
counselling, Organizational learning,
Leadership, Teamwork, ...

2005 Agile, Lean, Large-Scale Scrum

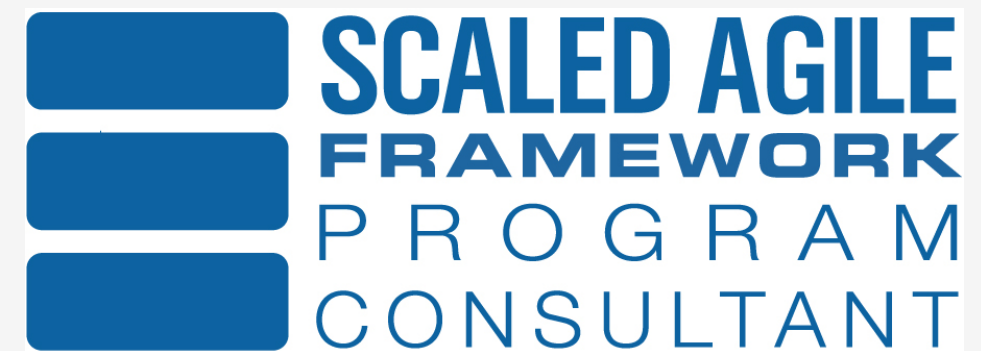
1994-2008 Nokia

2012 Gosei Ltd



**Understanding
Large Organisations
creates good action
in new situations.**

Nokia history



Want to Scale up?



Don't!

Adding more people just makes you slower.

-- director of SAGE program 1950's

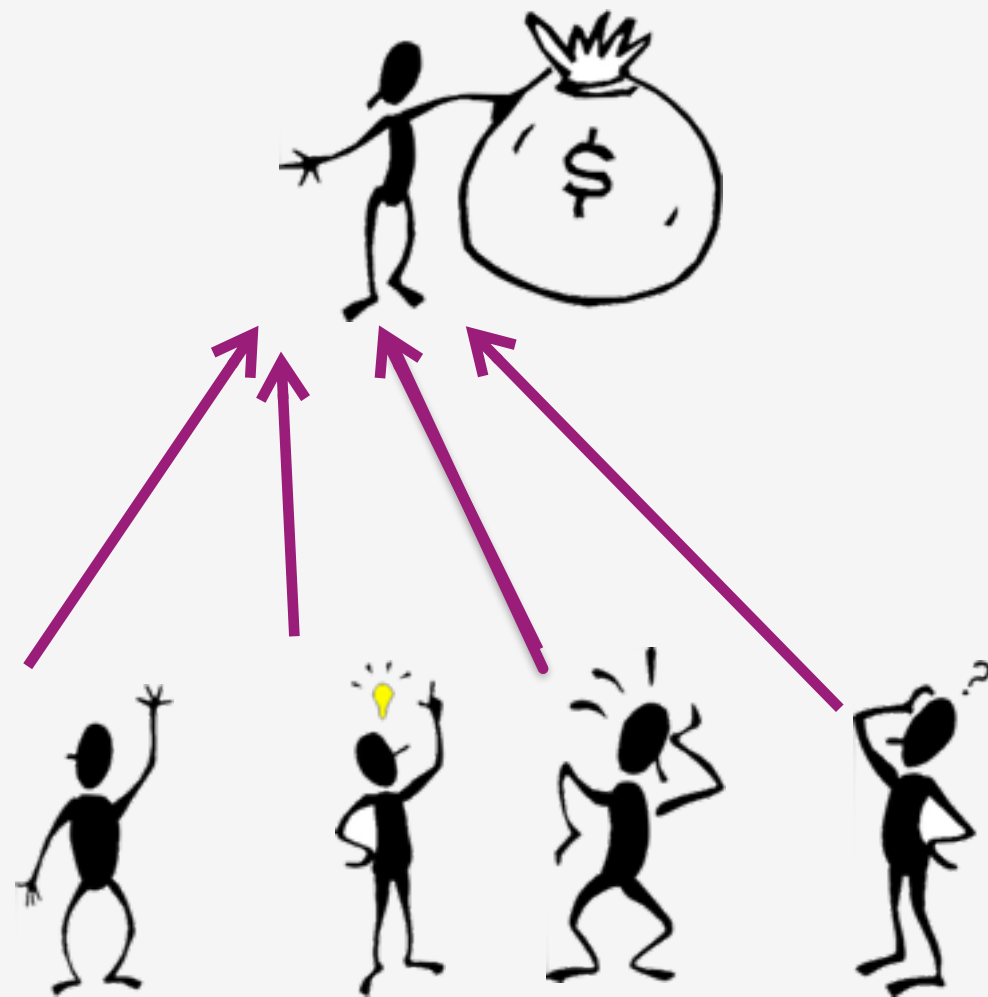
-- Frederick Brooks at Mythical man-month, 1975

How do you end up slow and wasteful?

Easily.

Coordination Chaos

In the beginning



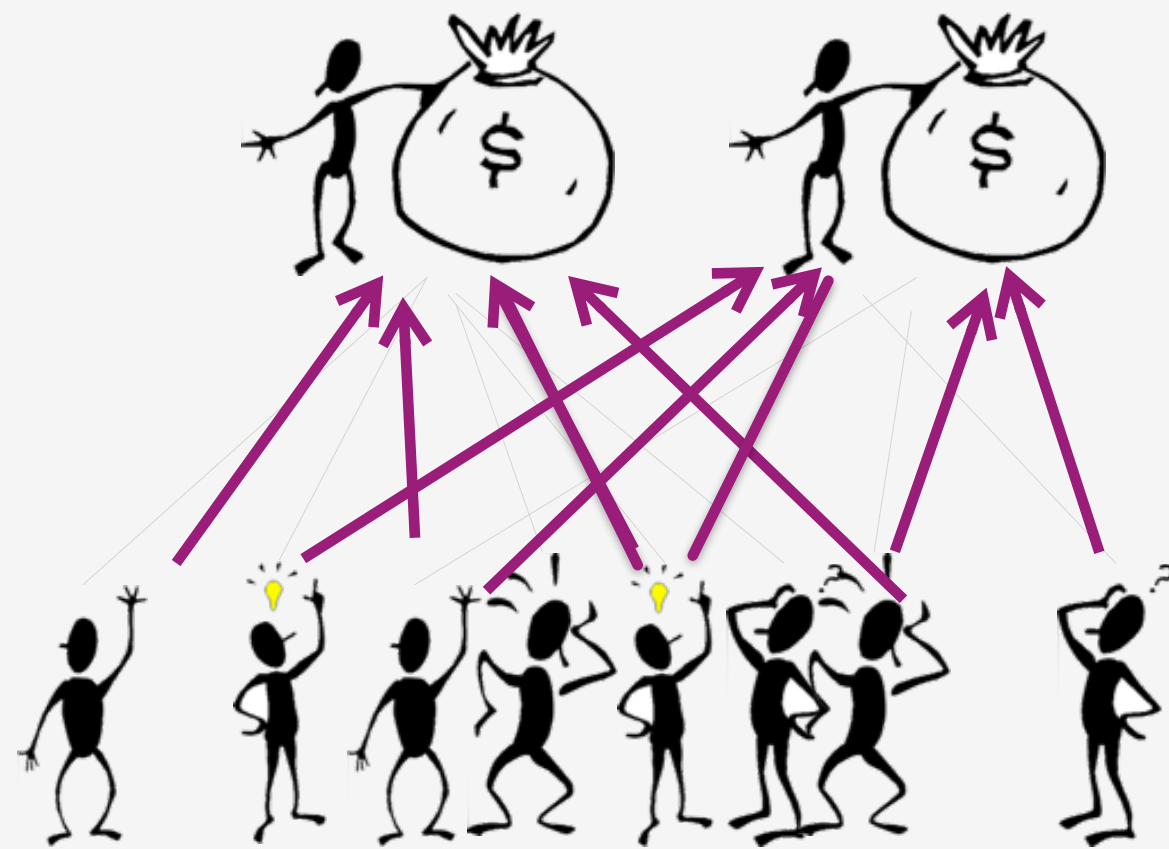
“Hey, We have business! And it is growing!”

“People just find their roles.”

“Specialists are irreplaceable. We need to optimize their individual performance.”



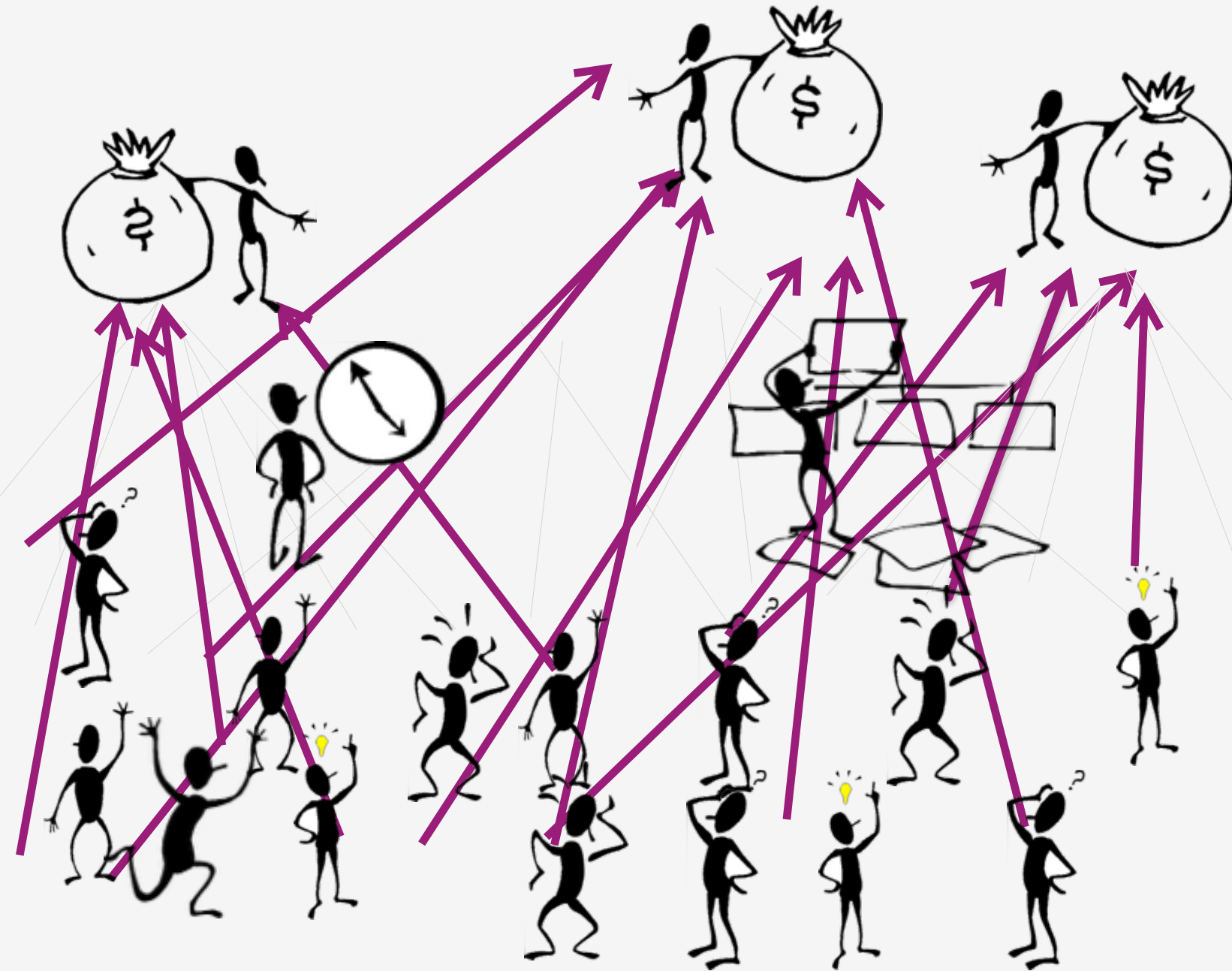
Growing the using common sense



“It starts to get messy. We need someone to look after things.”

“Lets hire a coordination specialist - the project manager.”

Growth continues

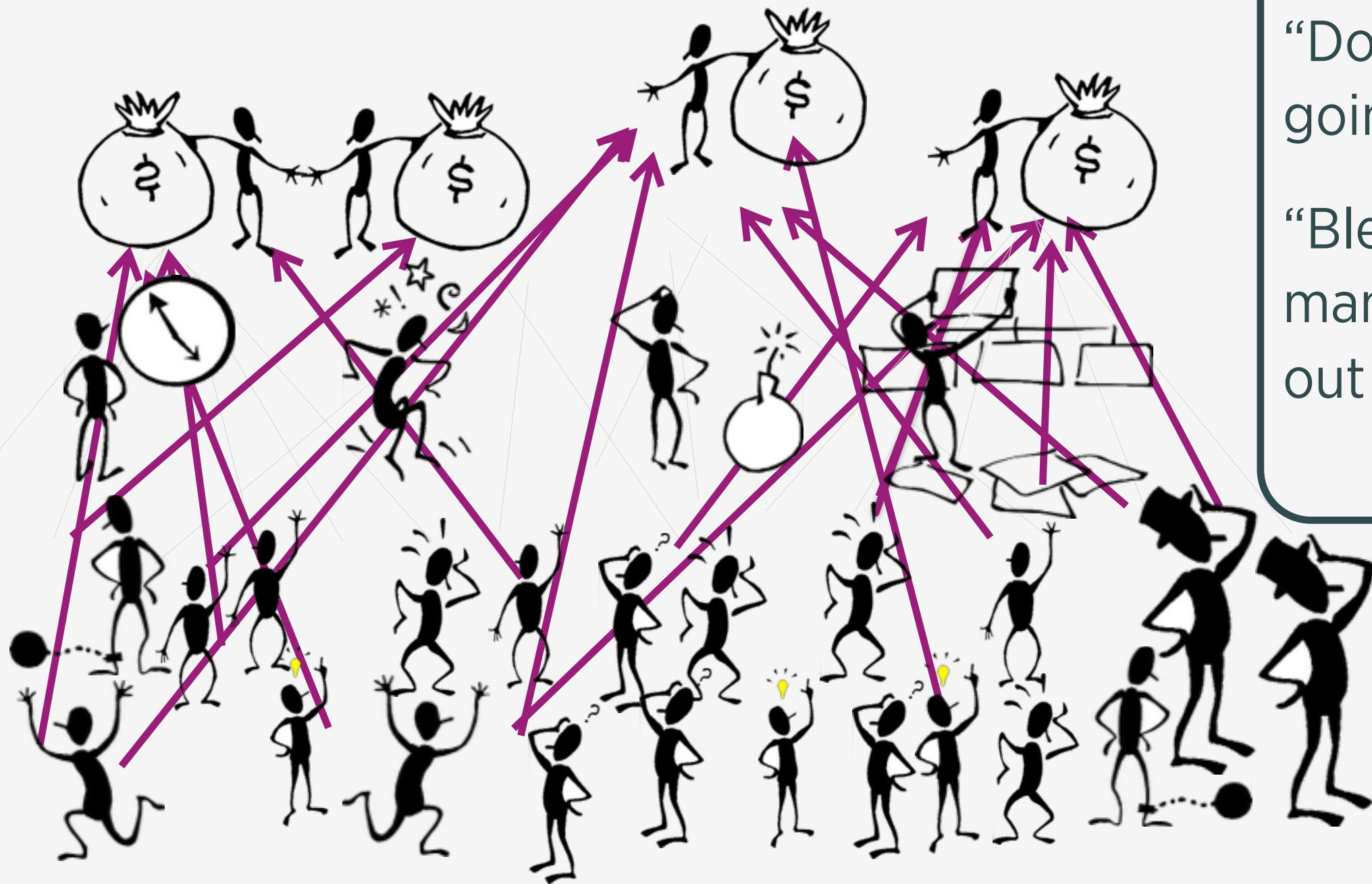


“The project managers really do their job.”

“Obviously it is best to give responsibilities to the specialized people.”



The coordinators become the heroes

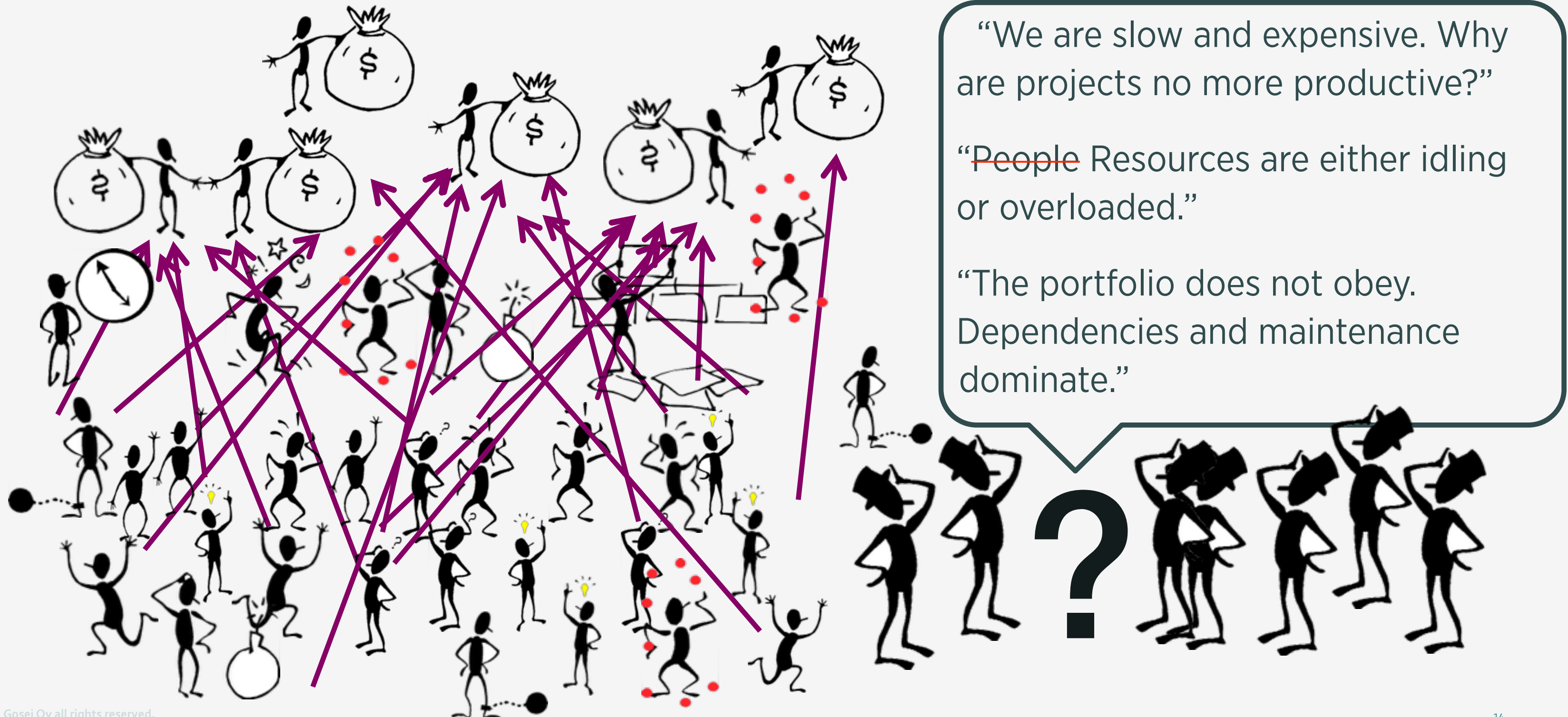


“Do You understand what is really going on?”

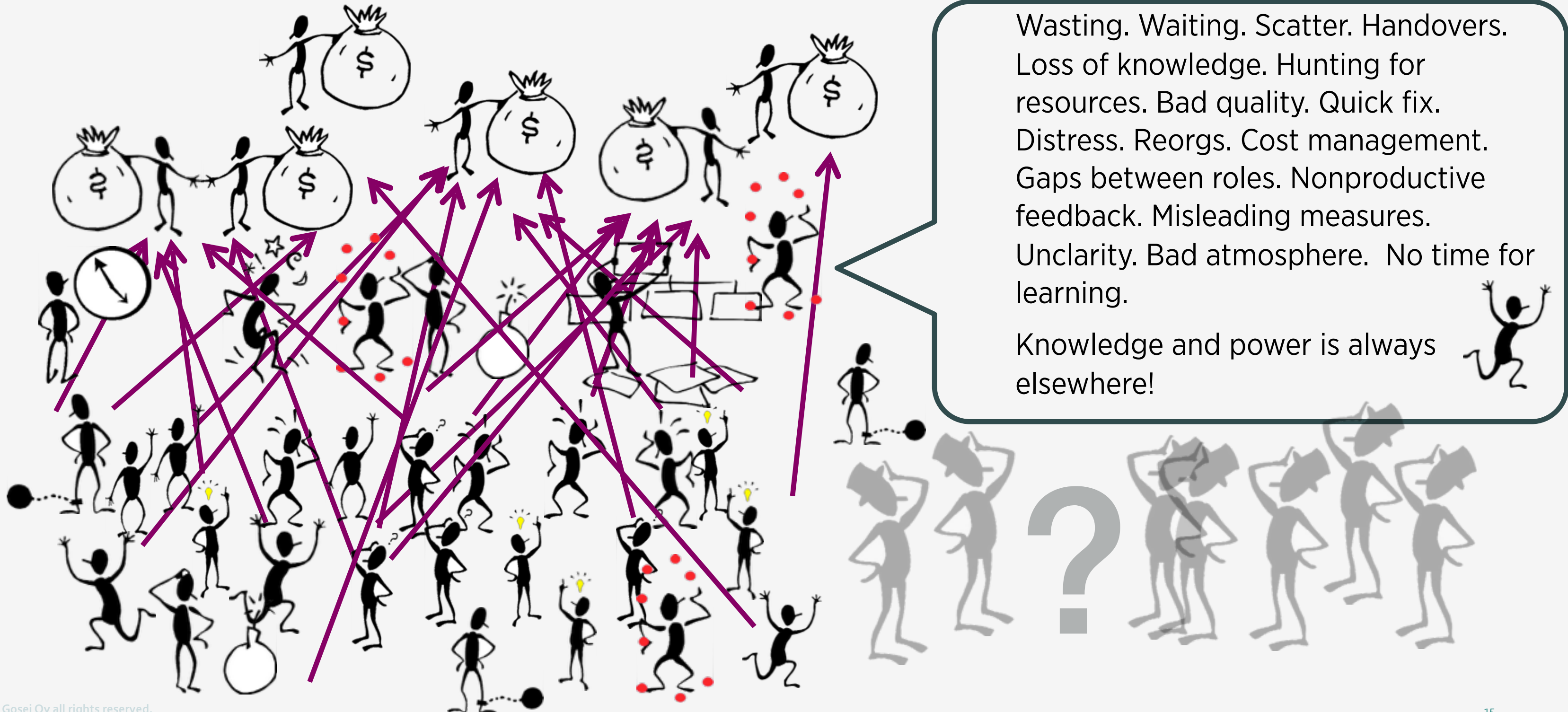
“Blessed the are project managers. They get something out of this mess.”



But... too much to be coordinated

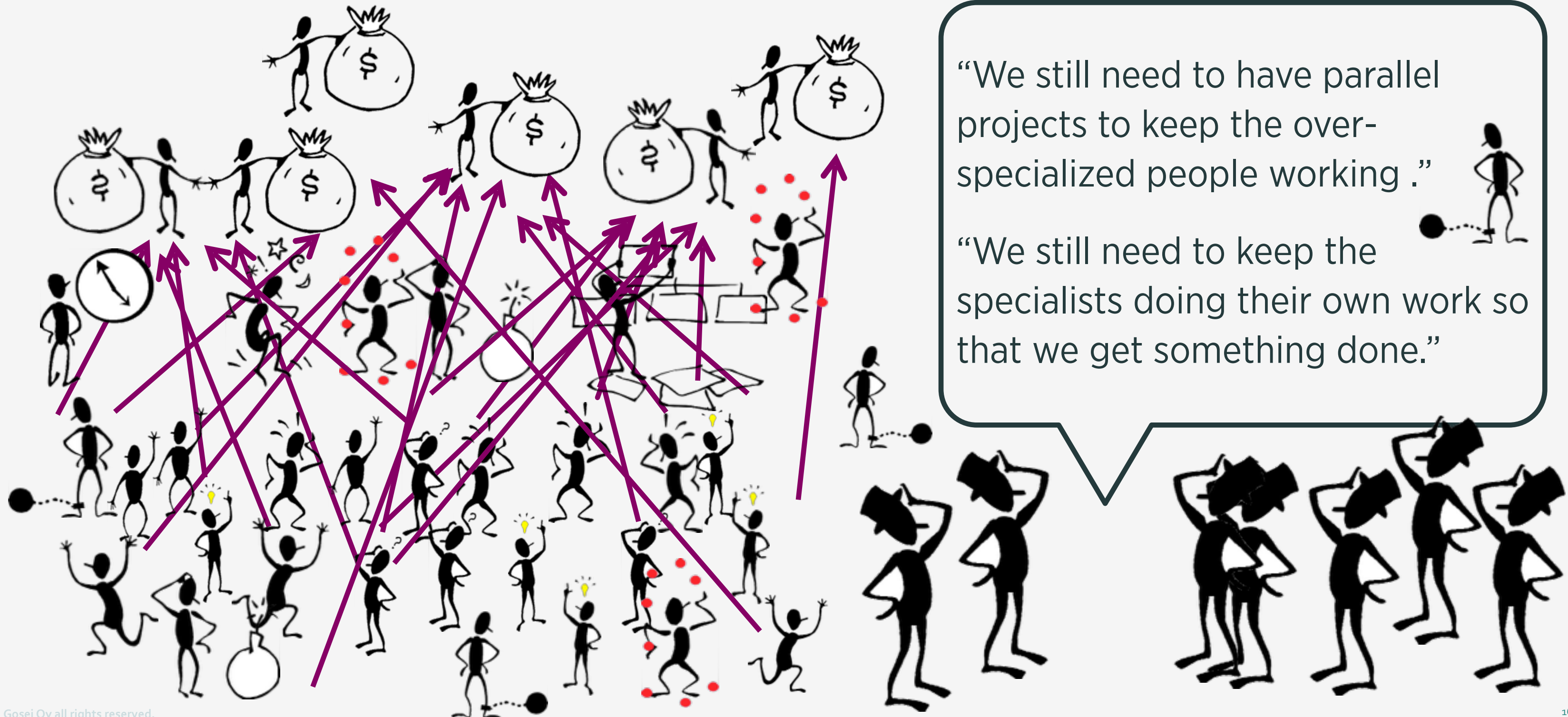


Symptoms of fragmented organization



Wasting. Waiting. Scatter. Handovers.
Loss of knowledge. Hunting for
resources. Bad quality. Quick fix.
Distress. Reorgs. Cost management.
Gaps between roles. Nonproductive
feedback. Misleading measures.
Unclear. Bad atmosphere. No time for
learning.
Knowledge and power is always
elsewhere!

No change in thinking



Last hope



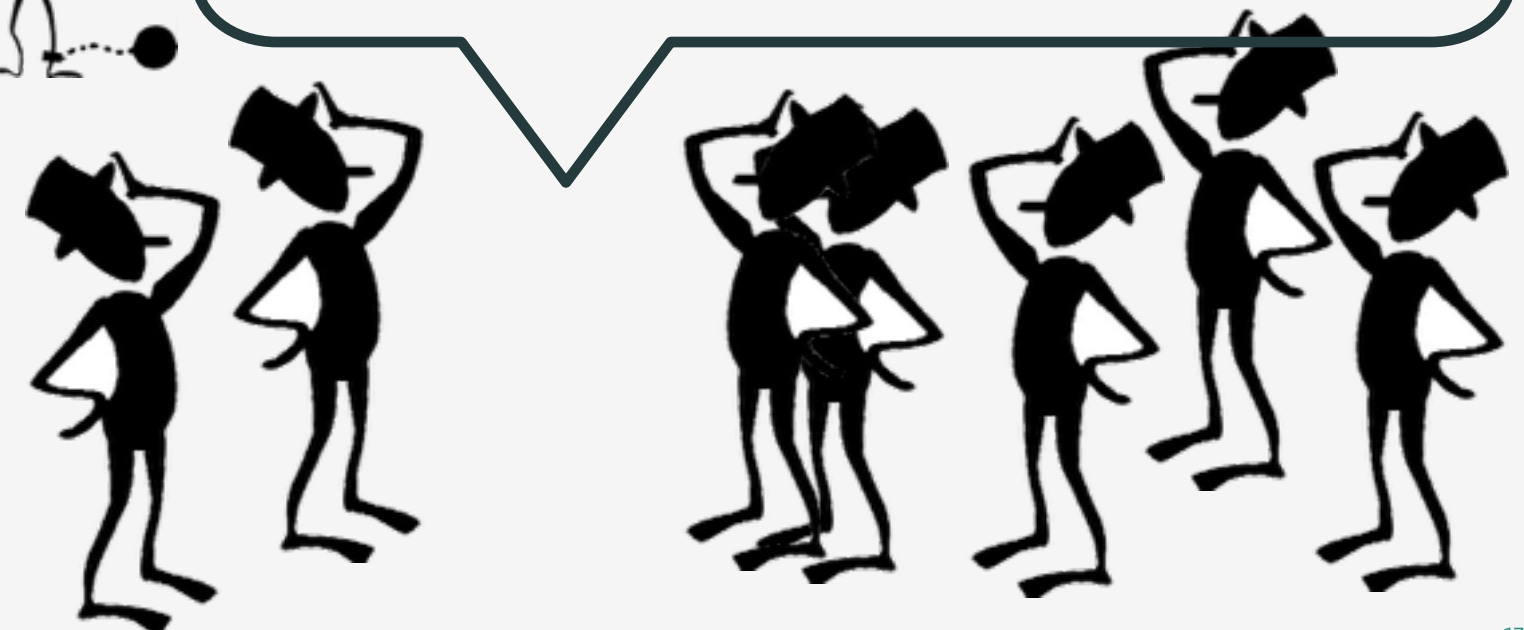
VALUE

COST

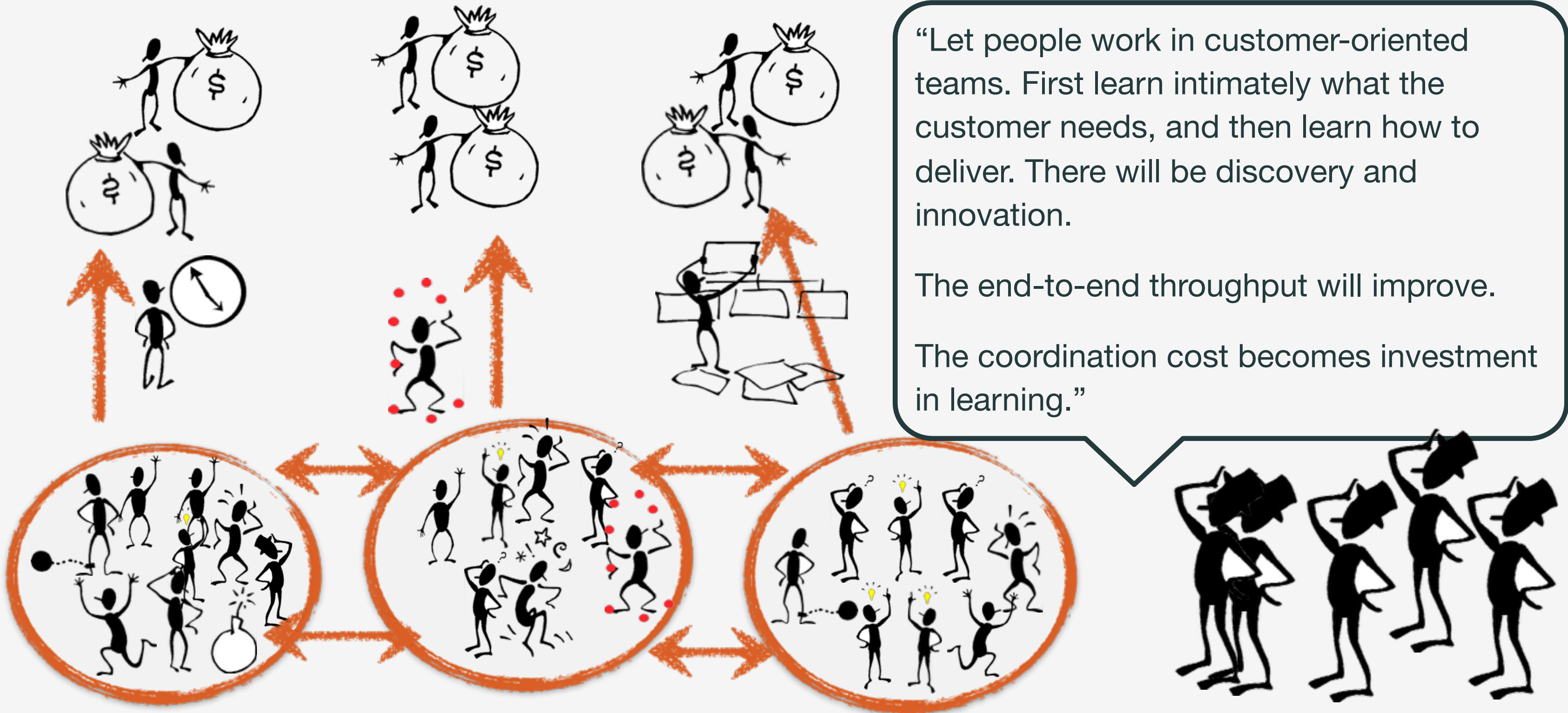
“We still have the customers. And the middle layer coordinates the value flow.”

“The development is too expensive and is difficult to manage.”

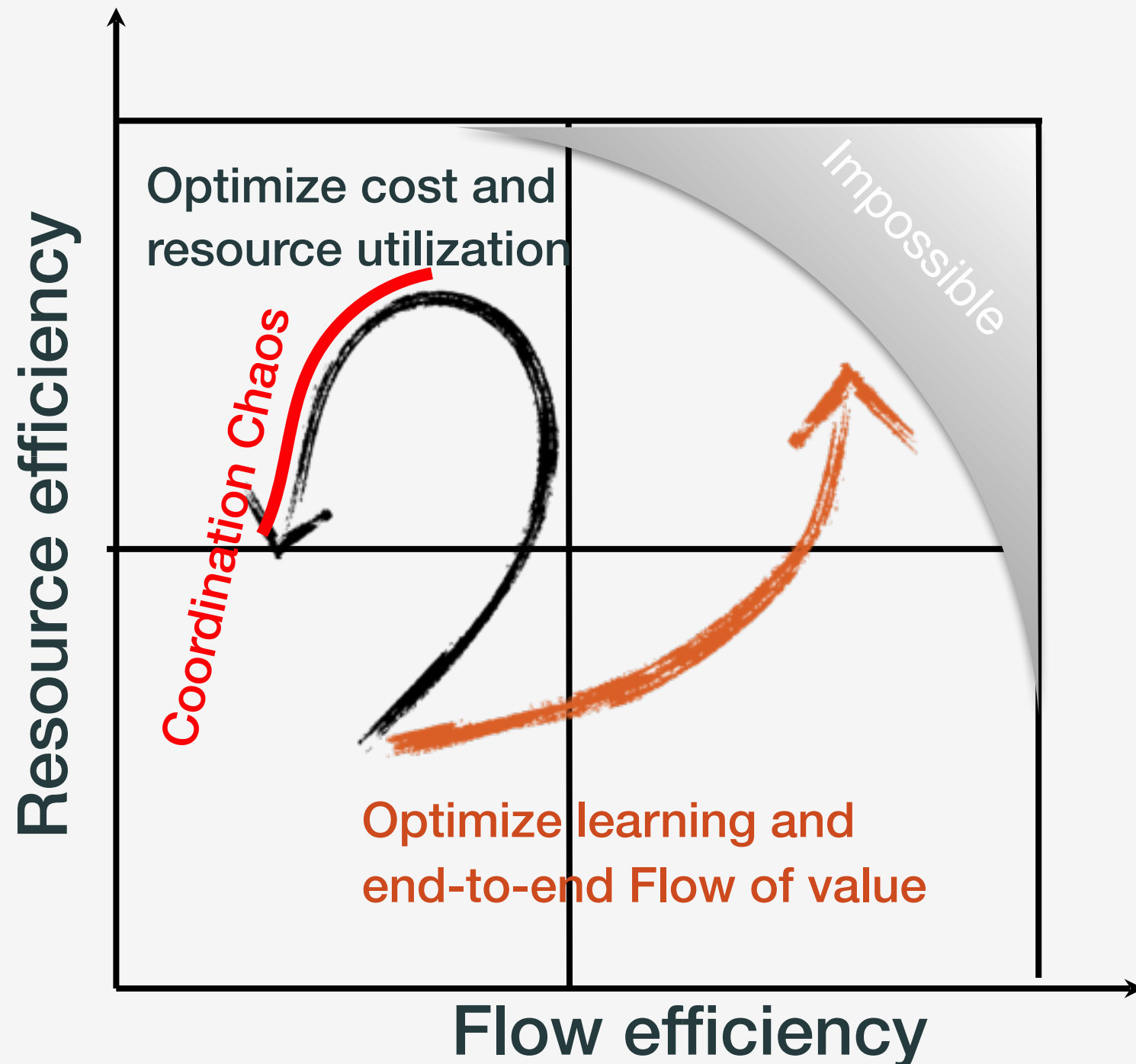
“But we can outsource the difficulty to an affordable provider, which we then can control through the agreement.”



Or fundamental change in thinking



Flow vs resource efficiency



Resource efficiency

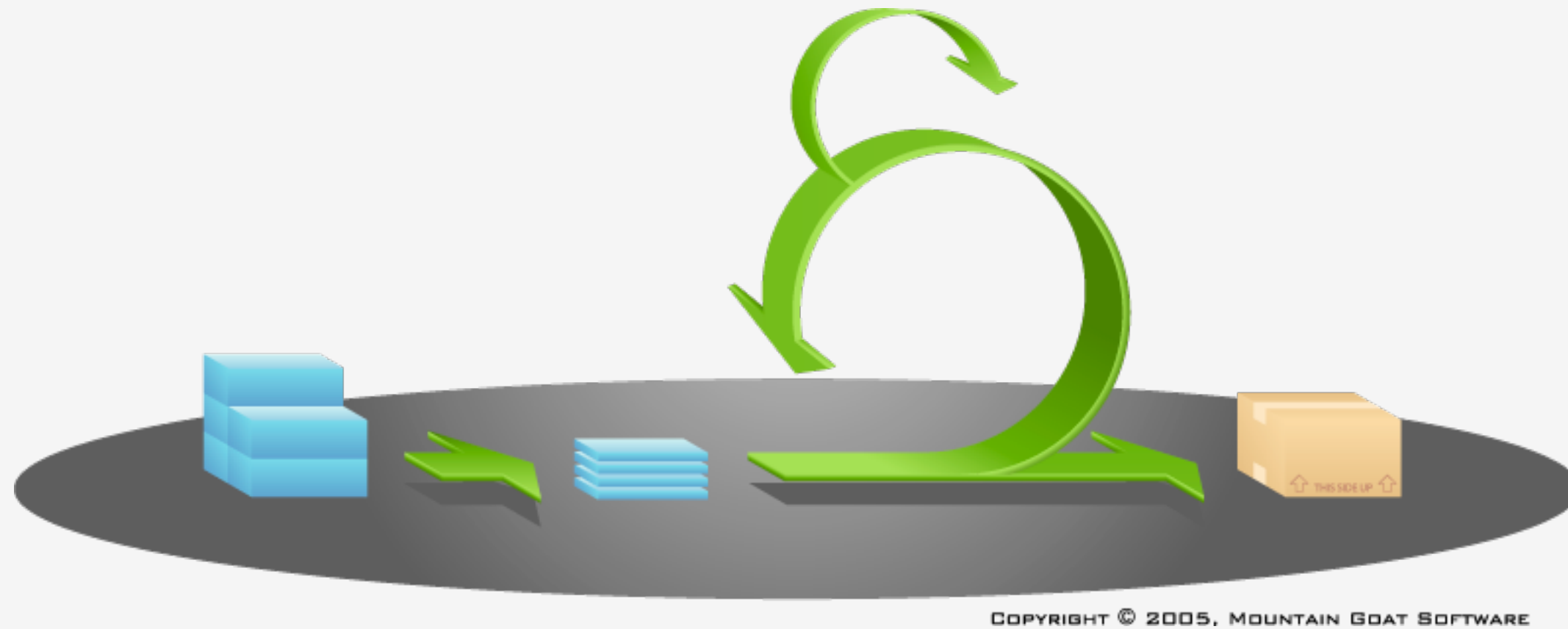
- Optimal with simple tasks in stable environment
- Specialization is locally economical, but makes the whole system fragile

Flow efficiency

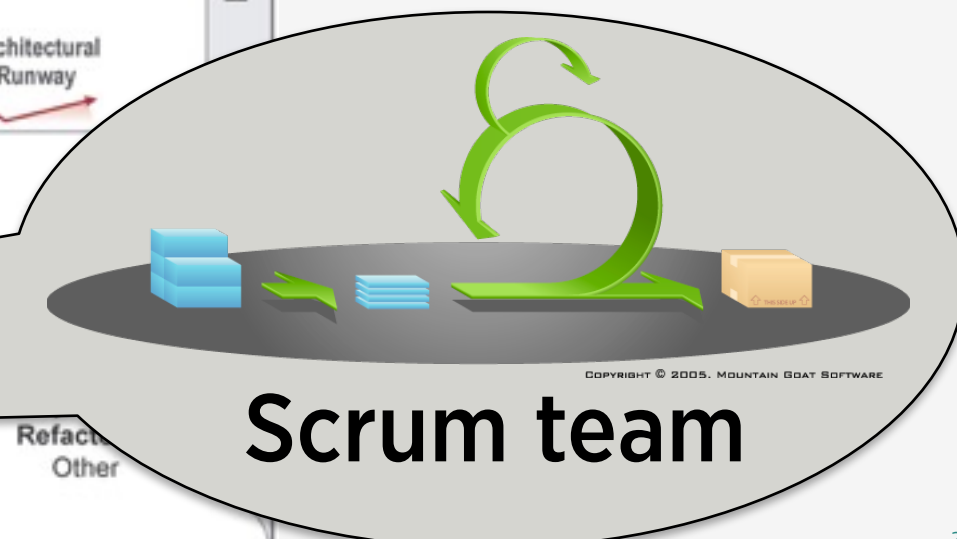
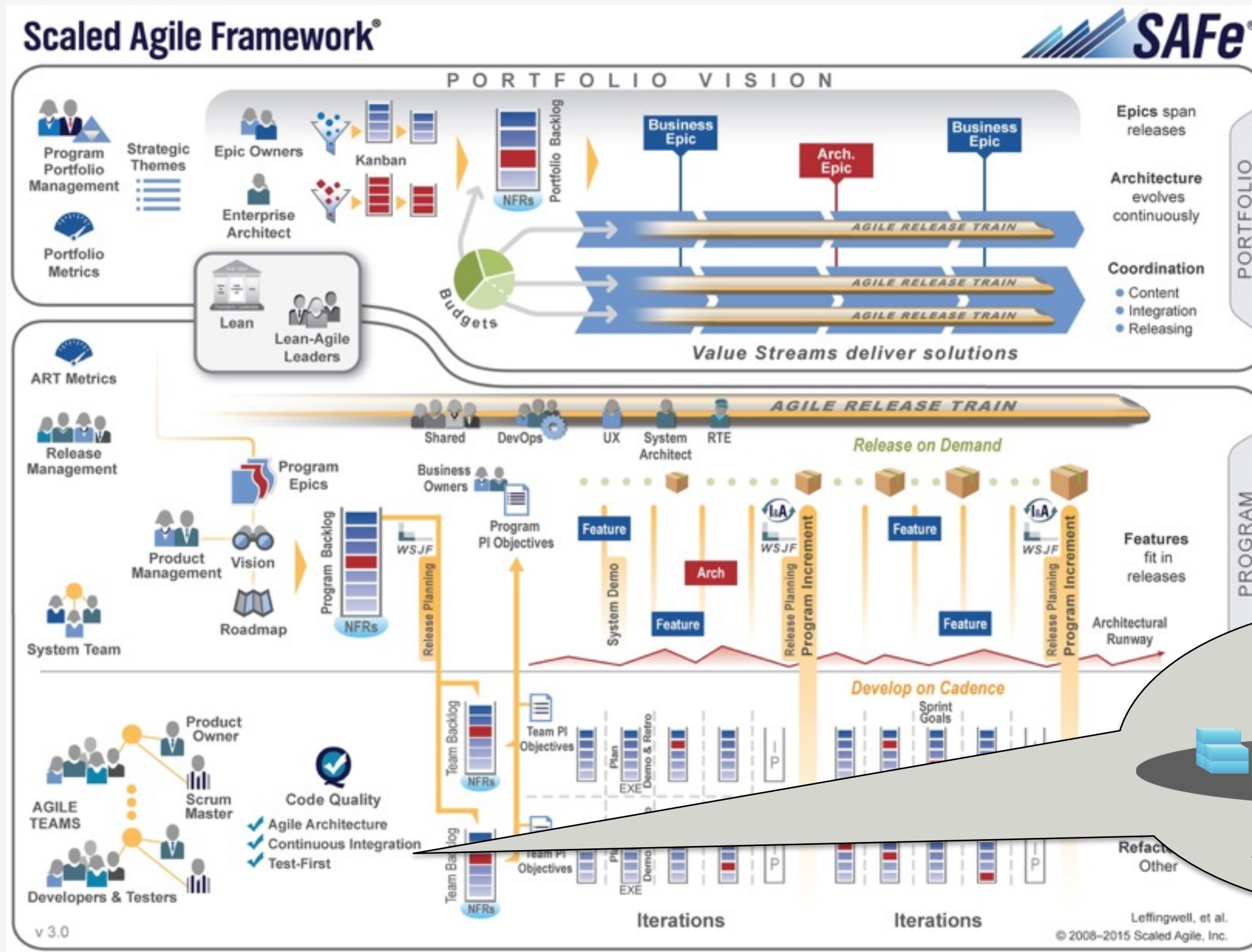
- Better for all knowledge work
- Optimizes the whole

What to DO?

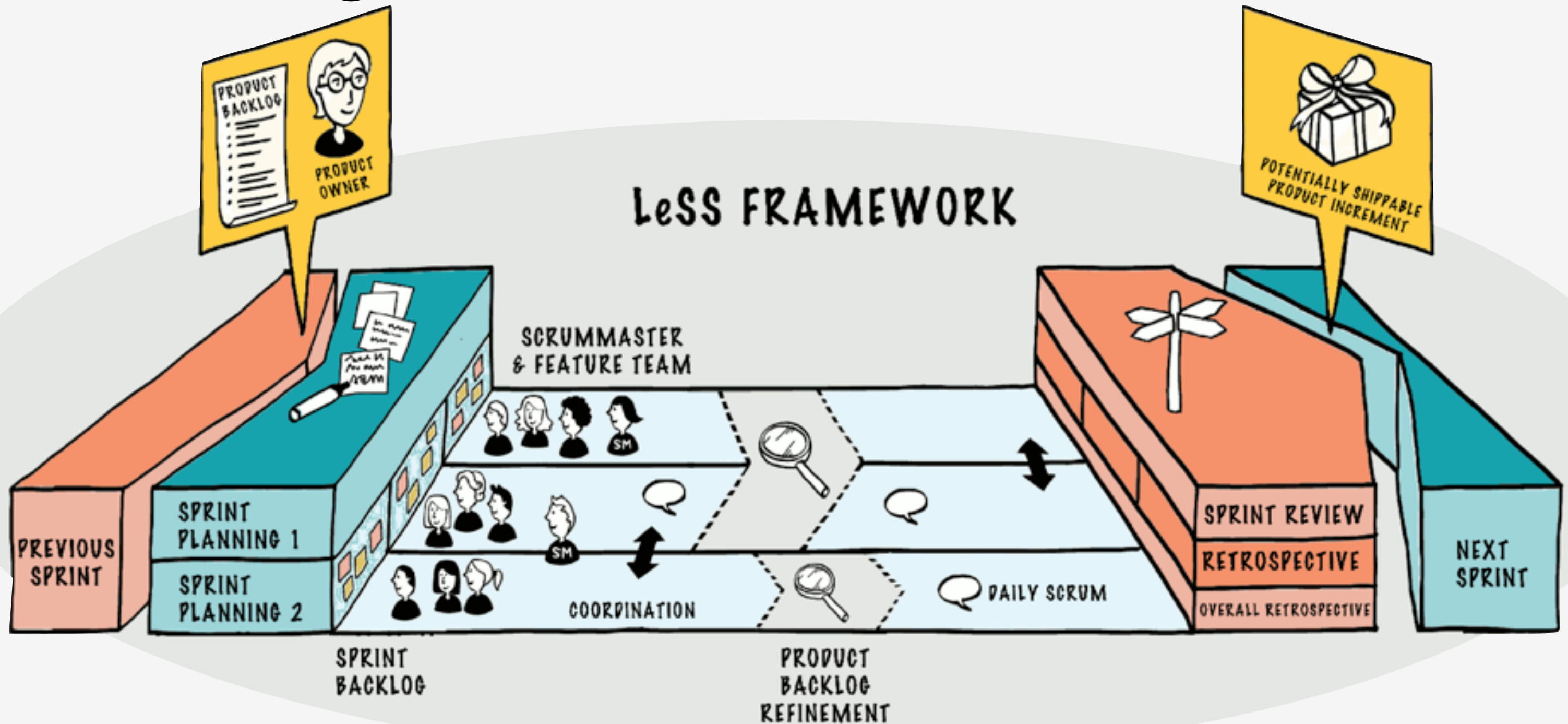
Scrum works for one team



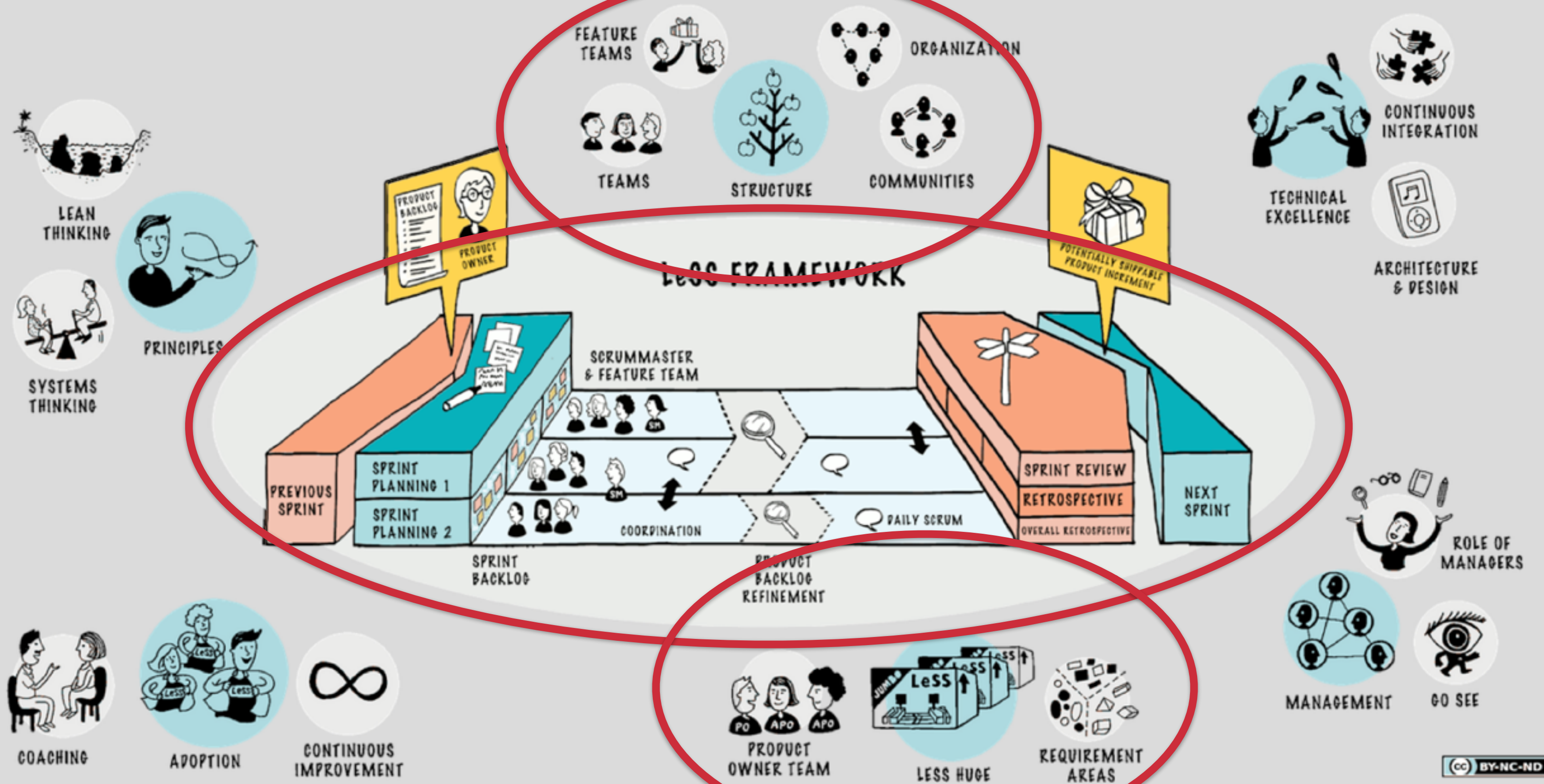
Program Execution



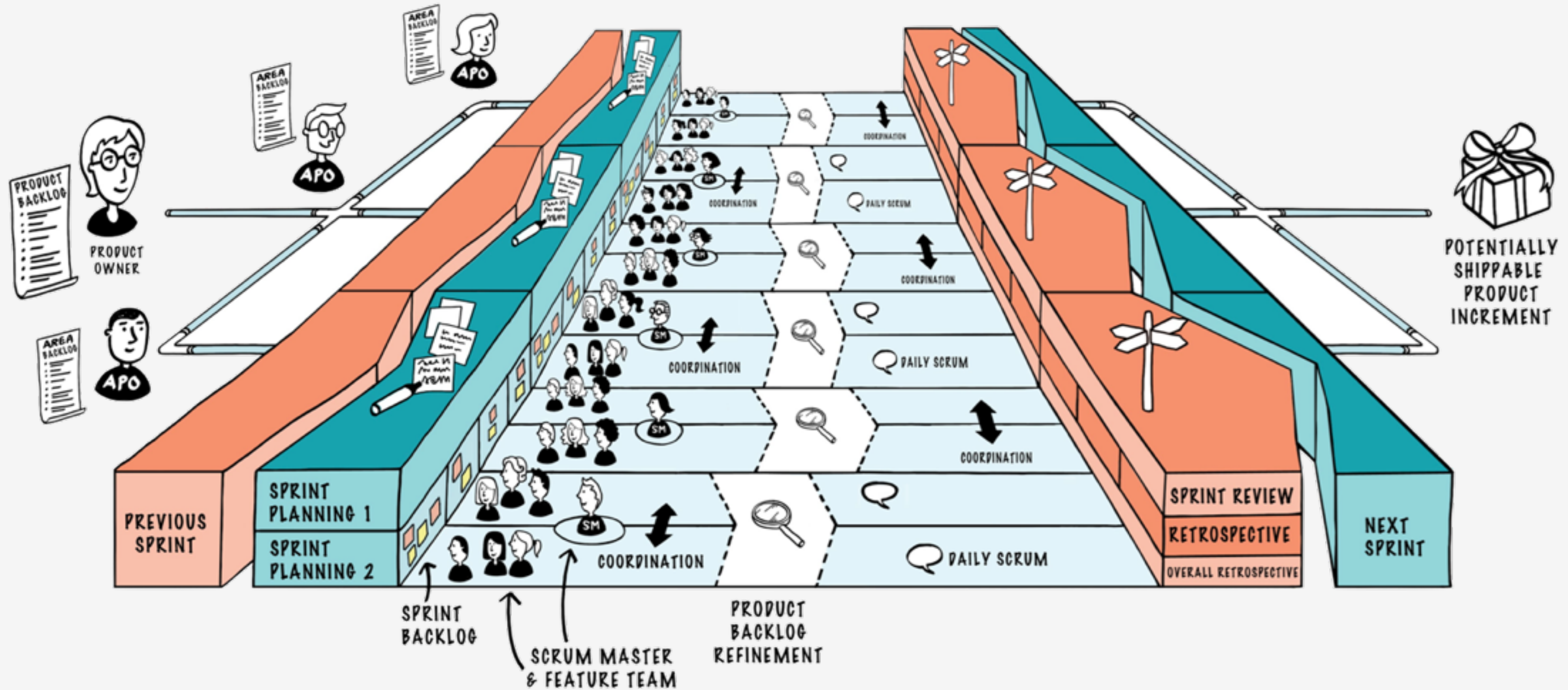
Large-Scale Scrum is Scrum



Enabling Scrum

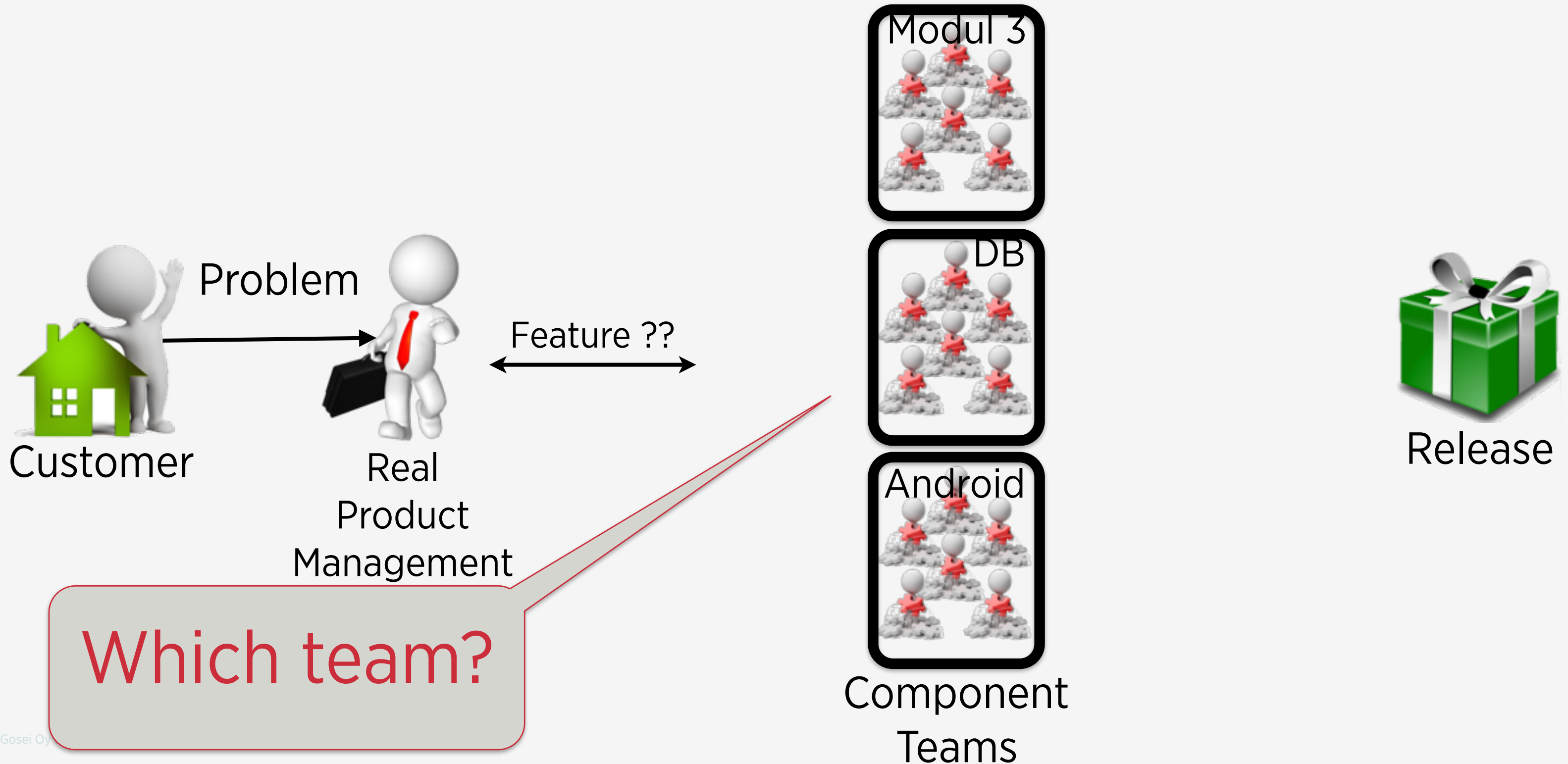


LeSS Huge



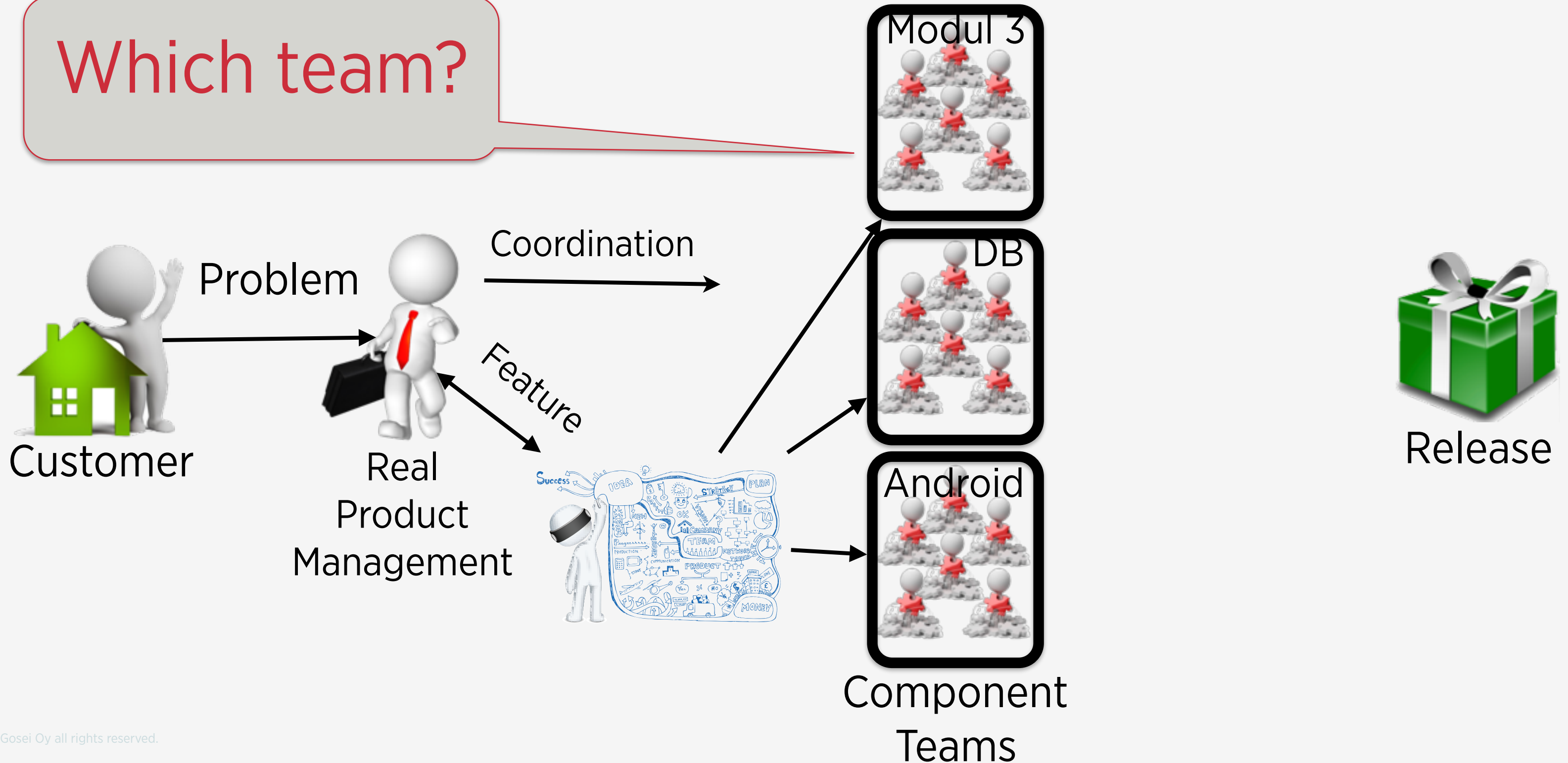
Specialisation hell

Technology/task/role-specialization

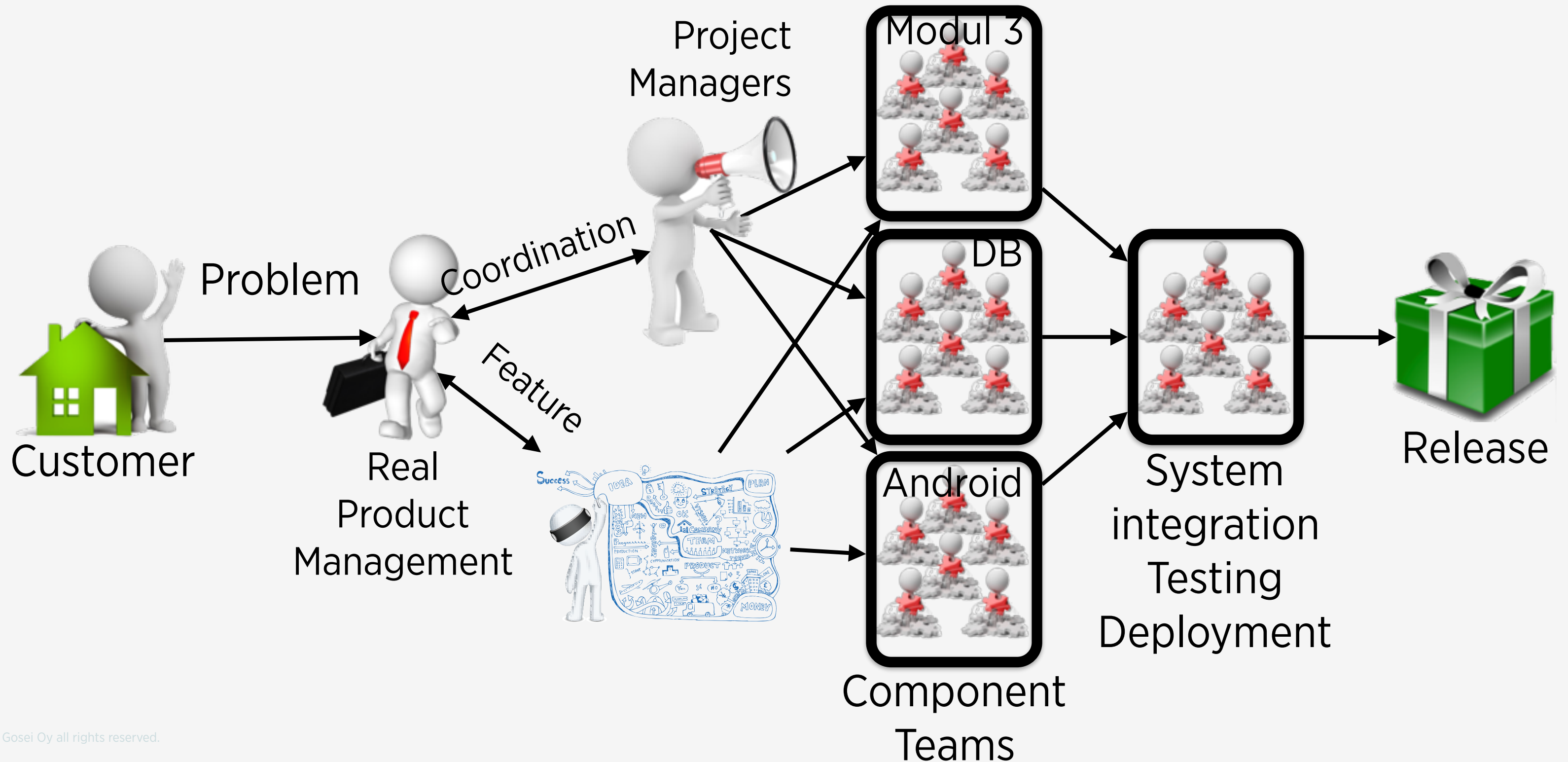


Technology/task/role-specialization

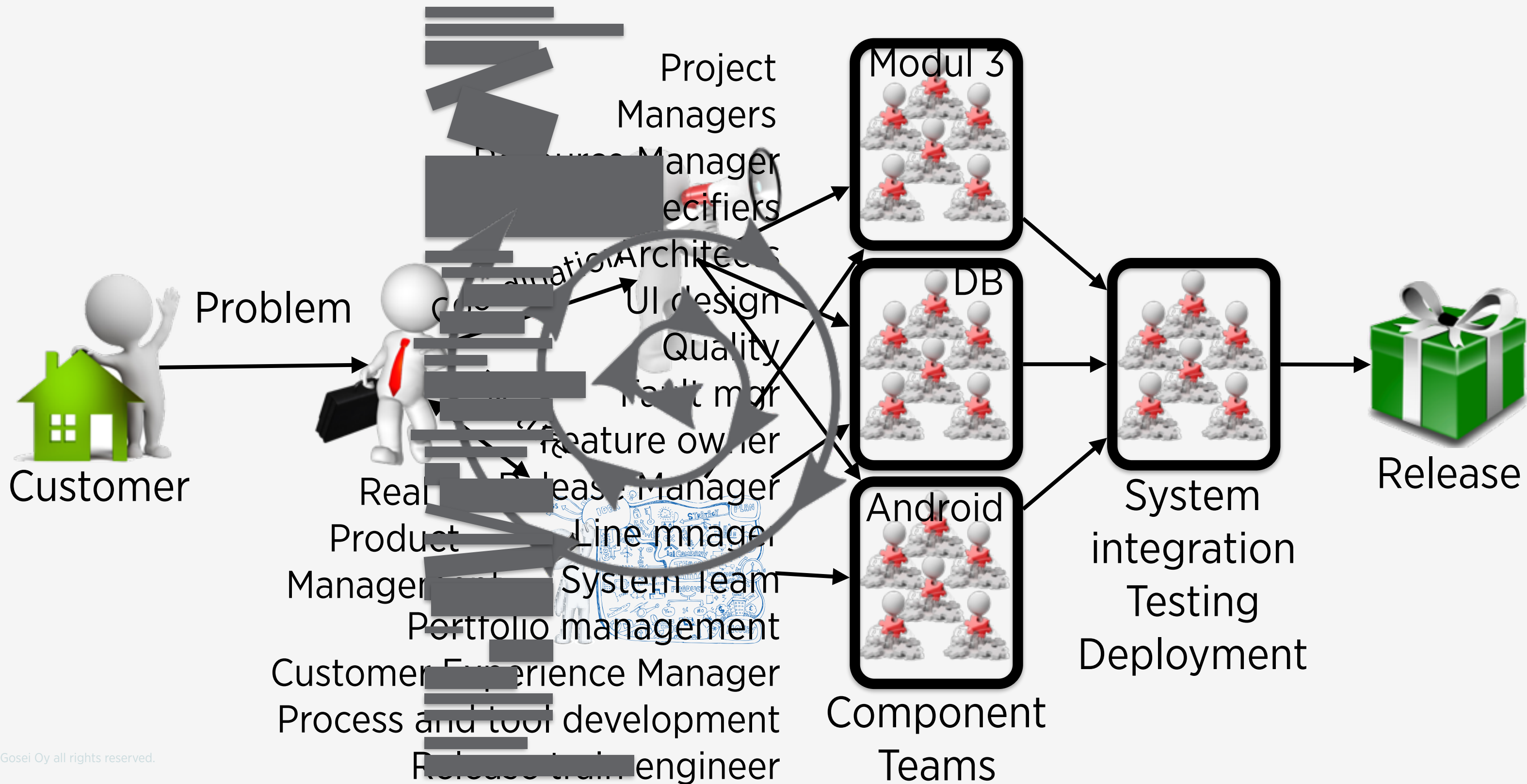
Which team?



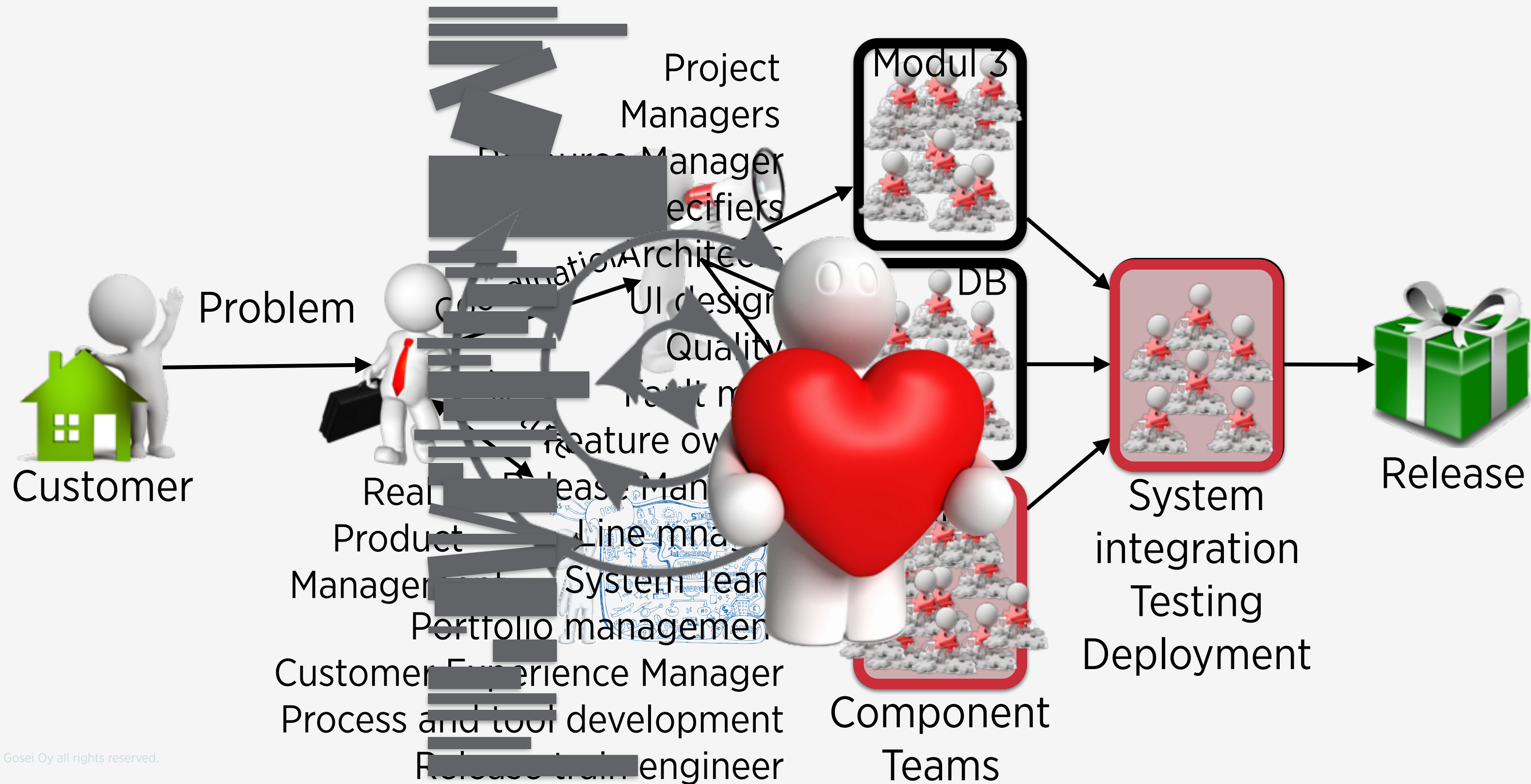
Technology/task/role-specialization



Technology/task/role-specialization

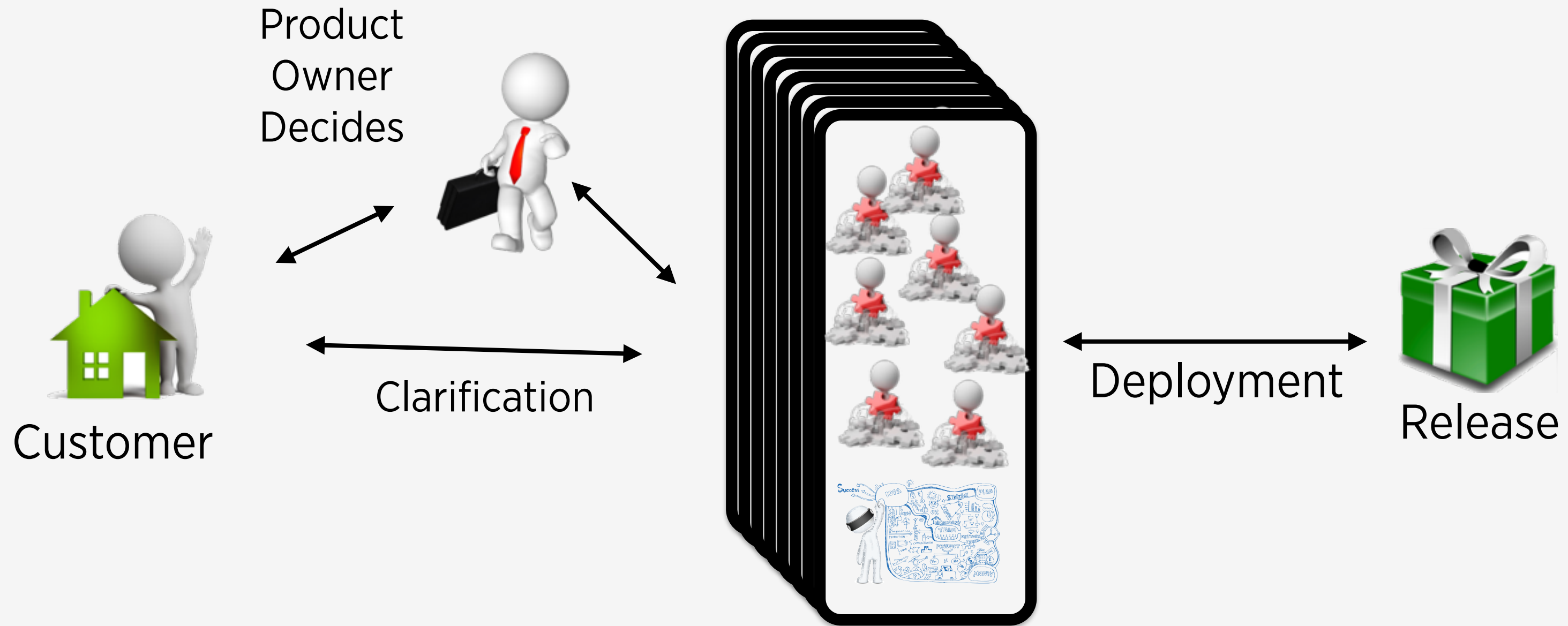


Technology/task/role-specialization



Scalable Organizational Architecture

Customer Specialization / Feature Teams



<http://www.featureteams.org>

Roles and subcultures

Three stakeholders

Owners, Investors

- Where we **invest time and money**

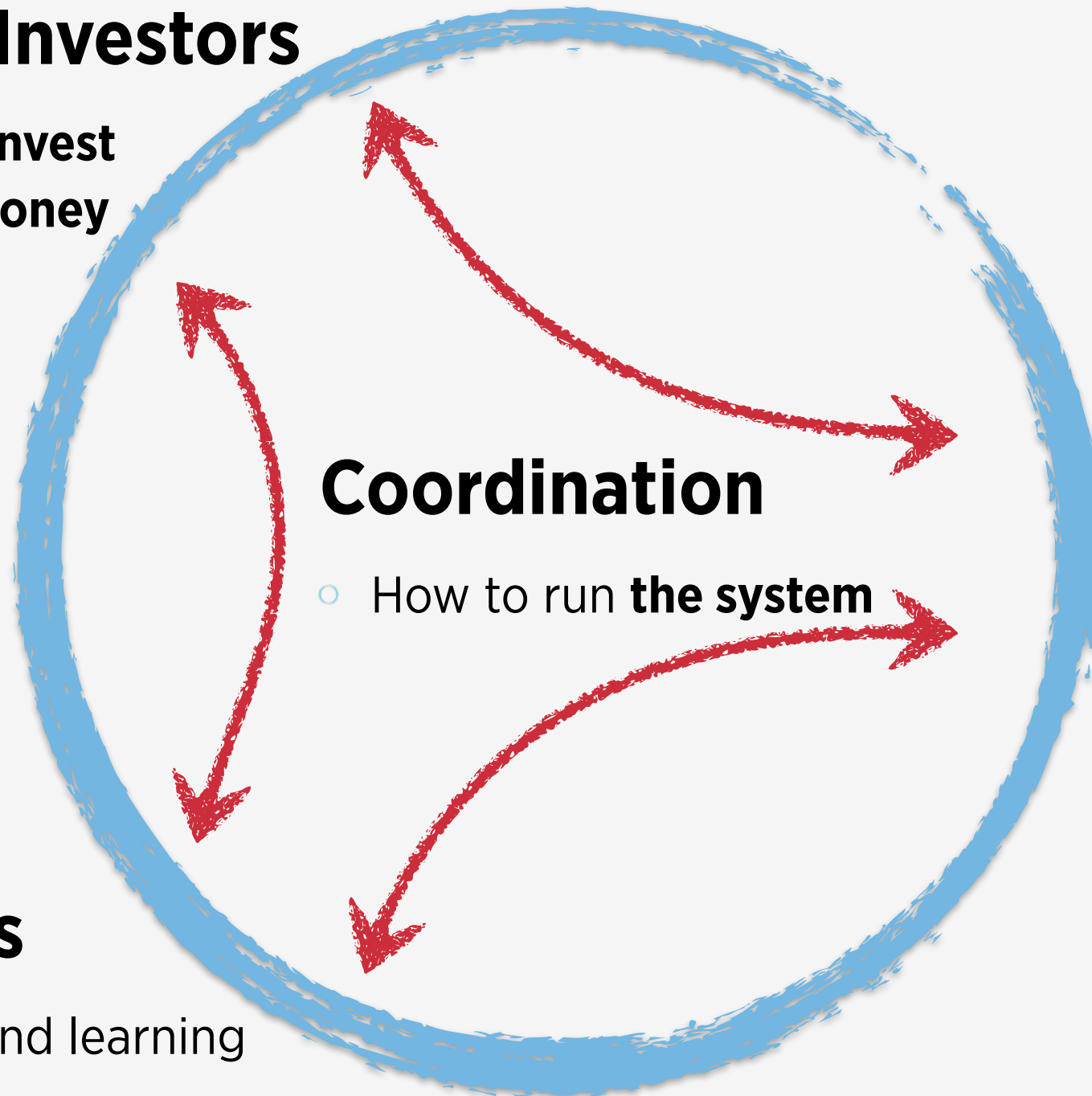
Customers

Users

- Choose best service
- What is **valuable**

Developers

- Invest effort and learning
- Choose best **technical solution**



Different worlds

World of
Business
Opportunities

Owners, Investors

- Where we **invest** time and money

Coordination

- How to run **the system**

Customers

Users

- Choose best service
- What is **valuable**

Developers

- Invest effort and learning
- Choose best **technical solution**

World of
Delivery

Surviving at everyday work shapes
the culture, language and meaning.

Subcultures evolve from
different work realities.

**Survival of fittest
Funnel**

Whole

Value

Promise now

**World of
Business
Opportunities**

Competition

Market risk

Change is valuable

Optimism

Market control - commitments

Reward power

Immaterial



Clan control - creative work

Change costs

Actualises later

Tangible

Co-operation

Technical risk

**Only problems
are real**

Finish what you start

Cost

Specialist power

**World of
Delivery**



Pipe

Details

Owners, Investors

Customers

**World of
Business
Opportunities**

Coordination



Developers

Users

**World of
Delivery**

Owners, Investors

Customers

**World of
Business
Opportunities**

Coordination



Developers

Users

**World of
Delivery**

Owners, Investors

Customers

**World of
Business
Opportunities**

**Coordinators
Managers
Lonely specialists**



Developers

Users

**World of
Delivery**

Control

William G. Ouchi

Identified management control mechanisms

Inventor of motivation Theory Z

- Addition to well know Theory X and Y

Influenced by Japanese management style



Control Systems in organizations by William G. Ouchi

Market system

Measure Input (€) and Output (€). Contractual between parties. Exact contract!

Bureaucratic system

Written rules and processes. E.g. Employment agreement and supervision.

Clan system

Informal value based rules that allow innovation and collaboration. Only this works for unique, interdependent or ambiguous task. E.g. SW Development

Three Layers in (large) Organizations

Economical reality

Business (top) management
Market control

Reward power

Middle management
Bureaucratic control
Internal reality
Analyze
Coordinate
Intermediate
Execute

Dependent power
->Politics

Front-end workers
Clan control

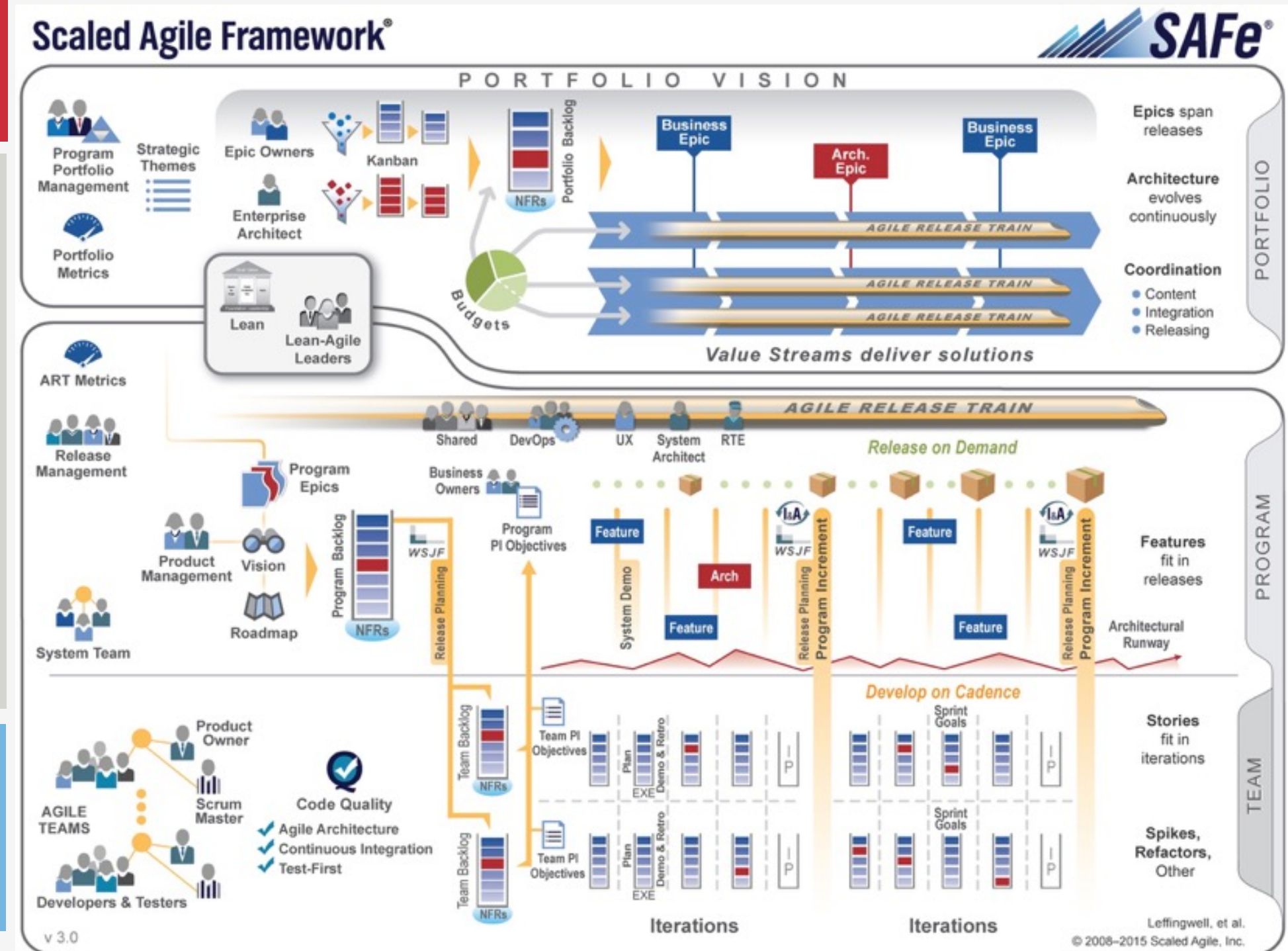
Expert power

Technical reality

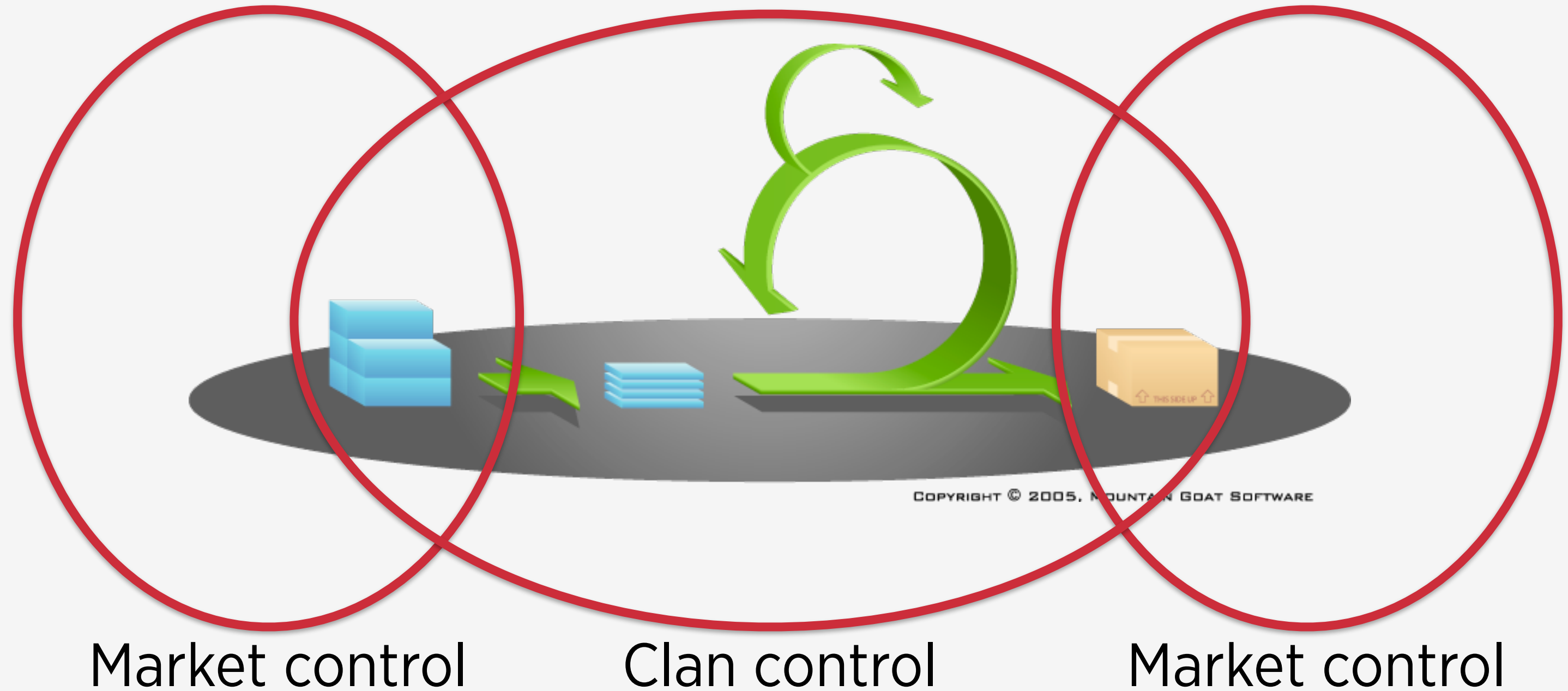
Market System (€)

Bureaucratic System (process, written rules, role descriptions)

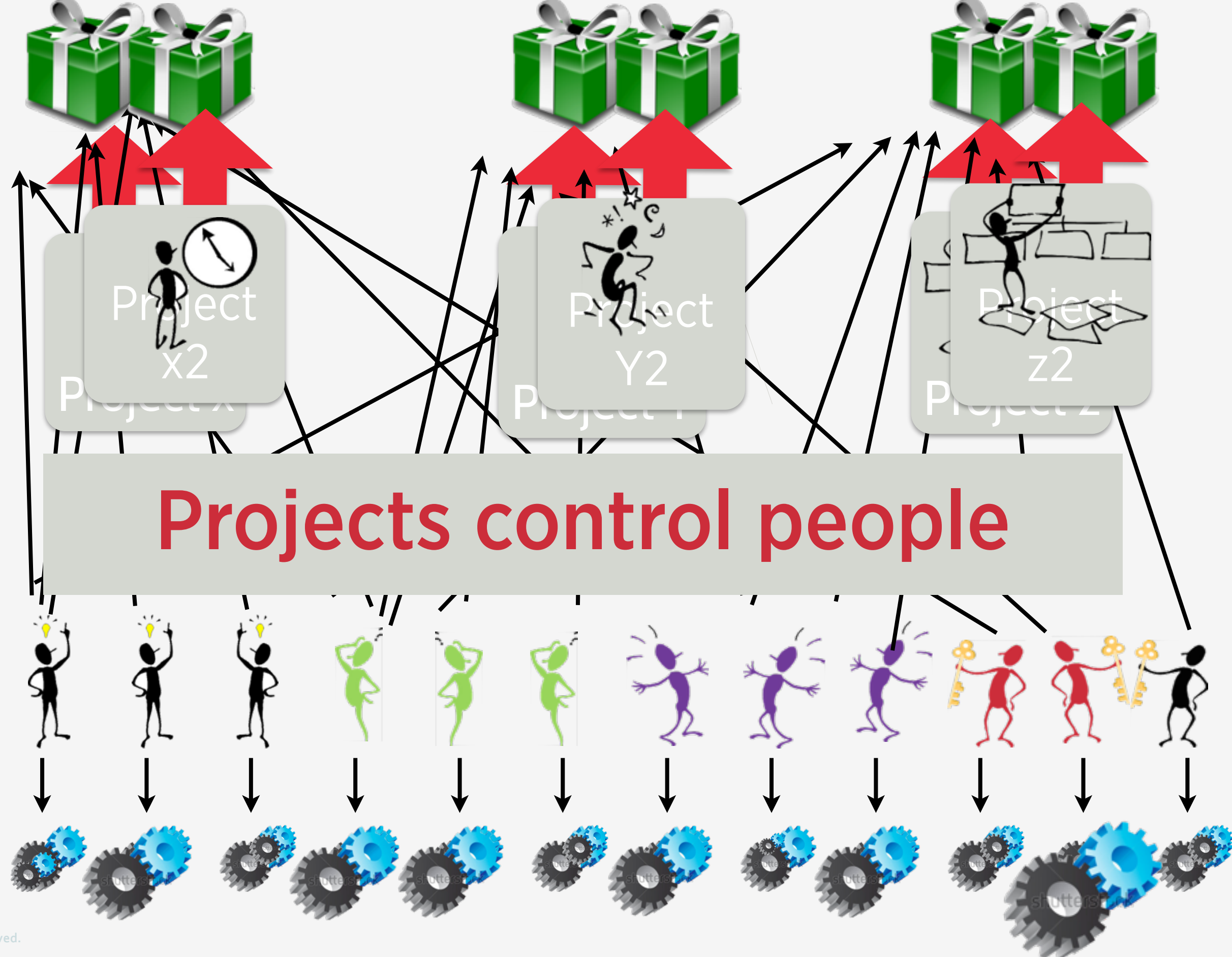
Clan System (social rules)



Contrast with Scrum



**Manage dependencies by
coordinating Peoples Time**

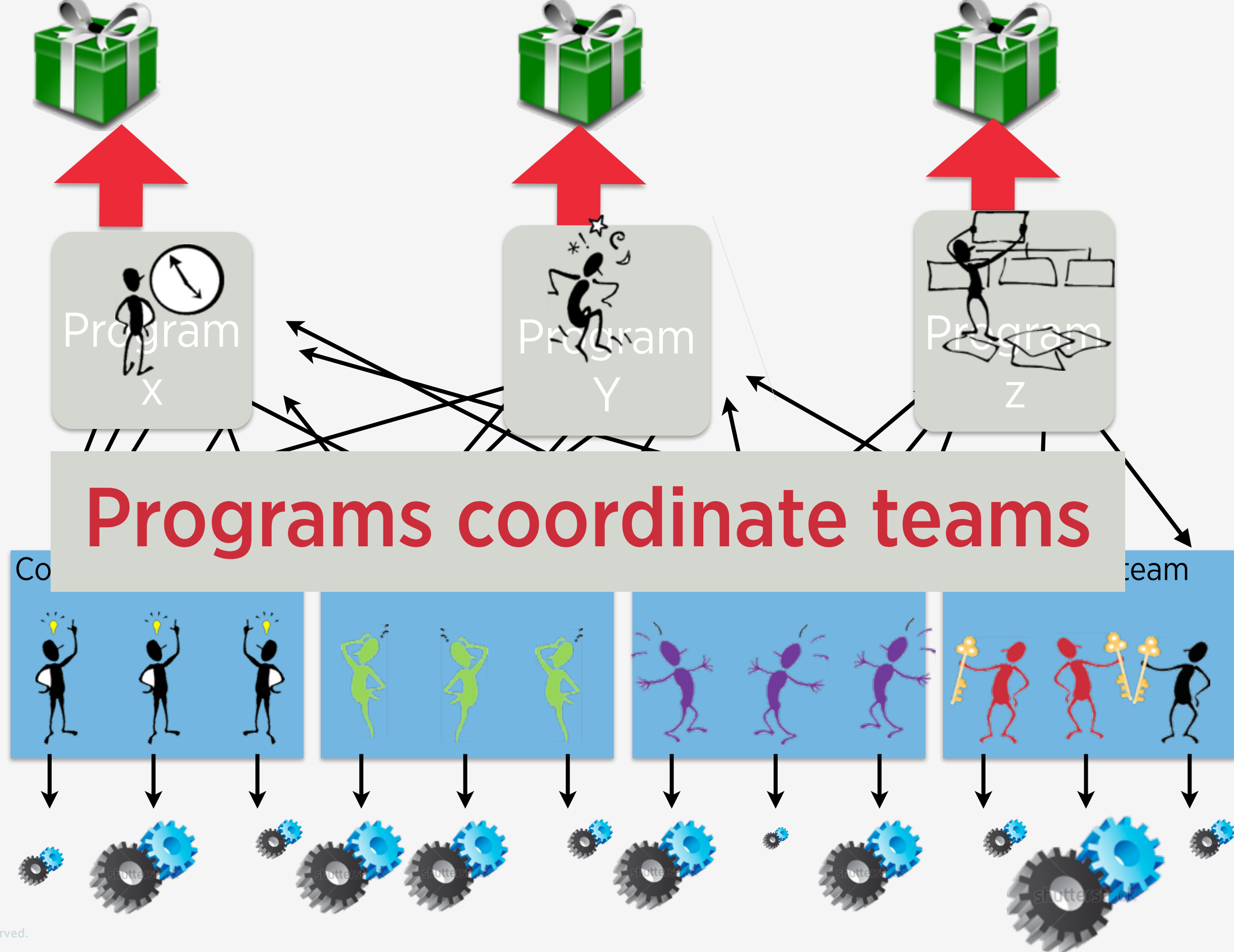


Market
Control

Bureaucratic
Control

Clan Control

Projects control people



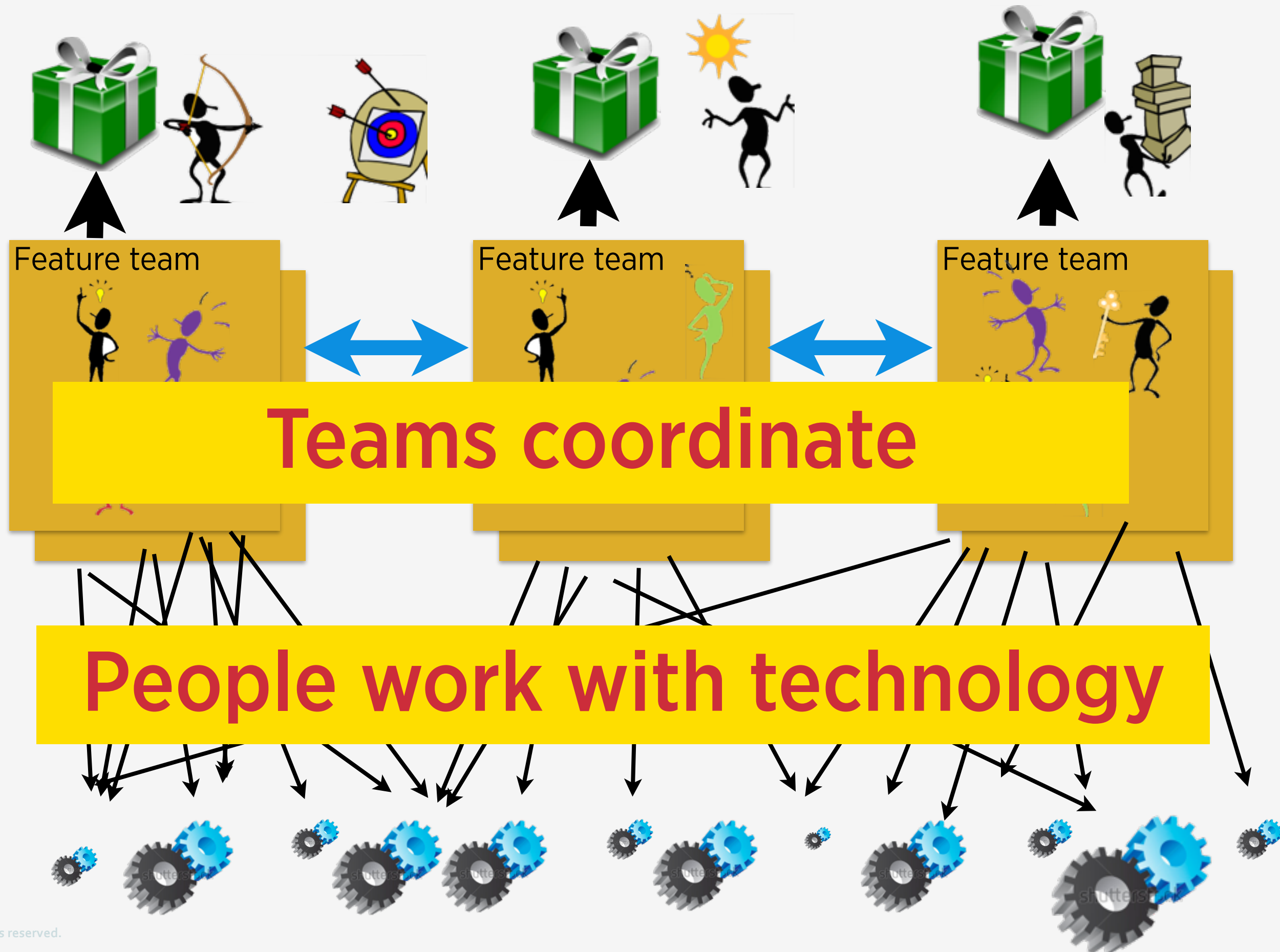
From coordinating Peoples' Time to Teams work with technical dependencies

<http://www.featureteams.org>

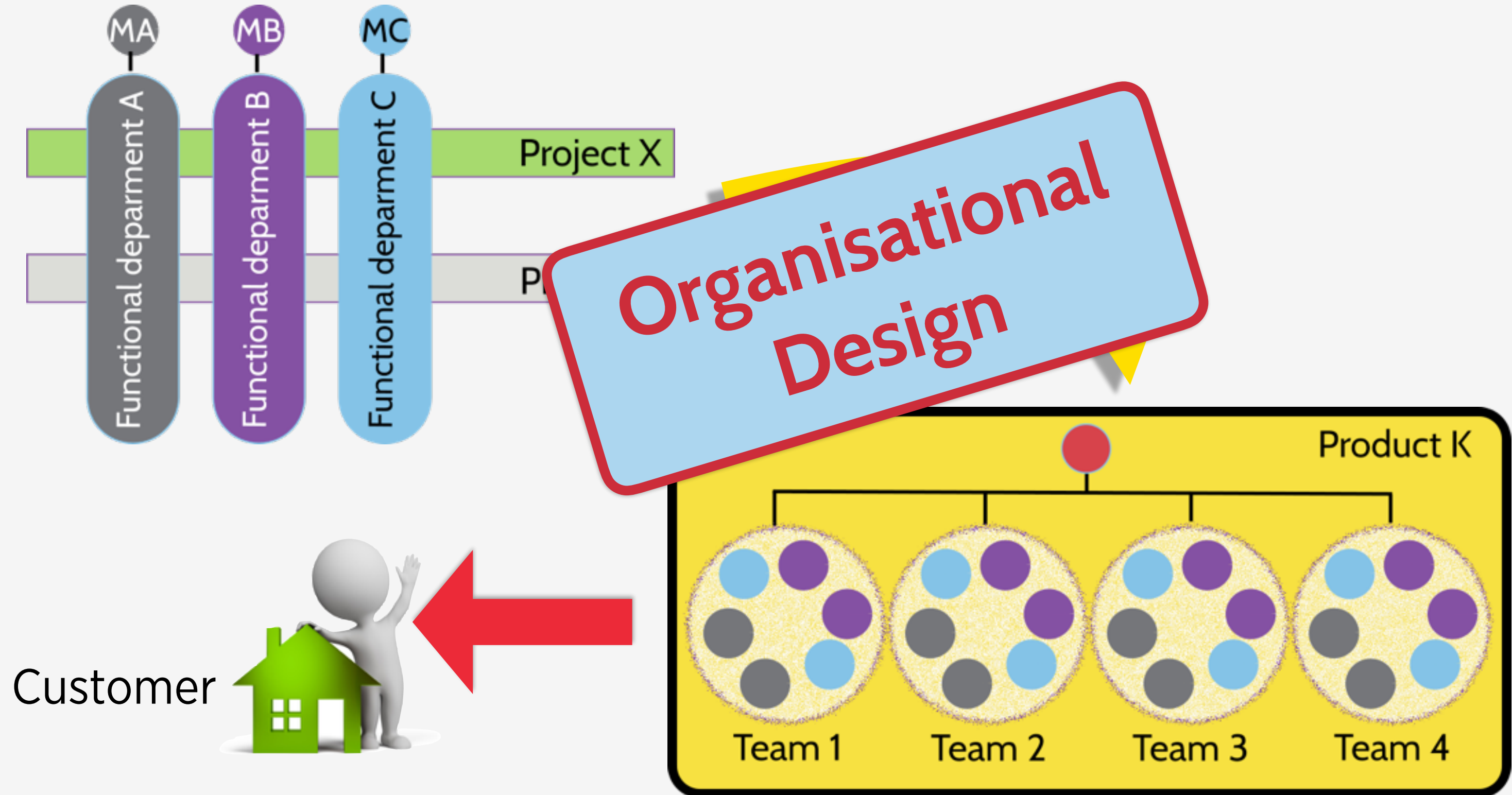
Market
Control

Bureaucratic
Control

Clan Control



Focus from Projects to Customer





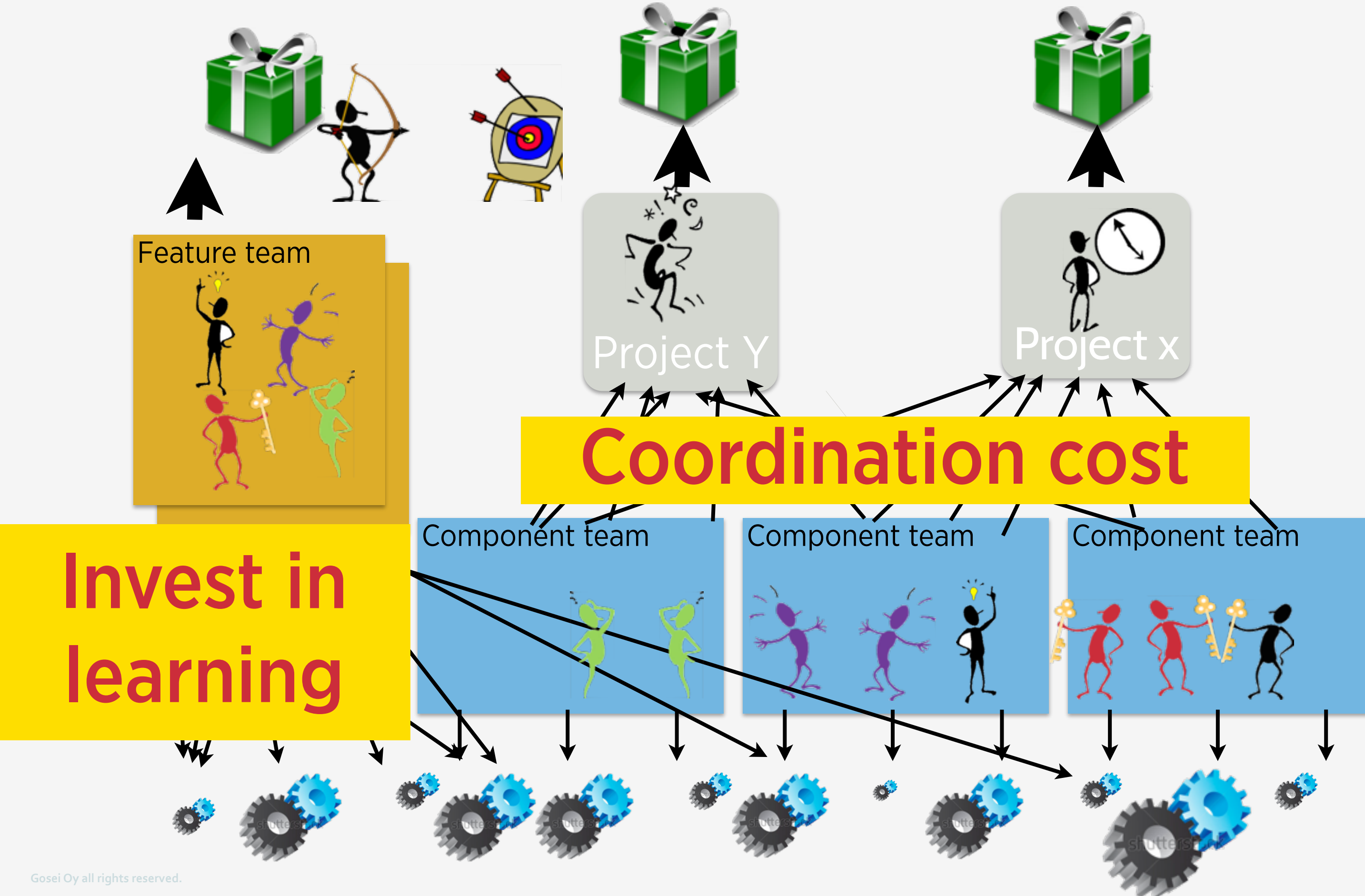
Noooooooo!
We can not
change
everything.

Yes, Your Fear is Just

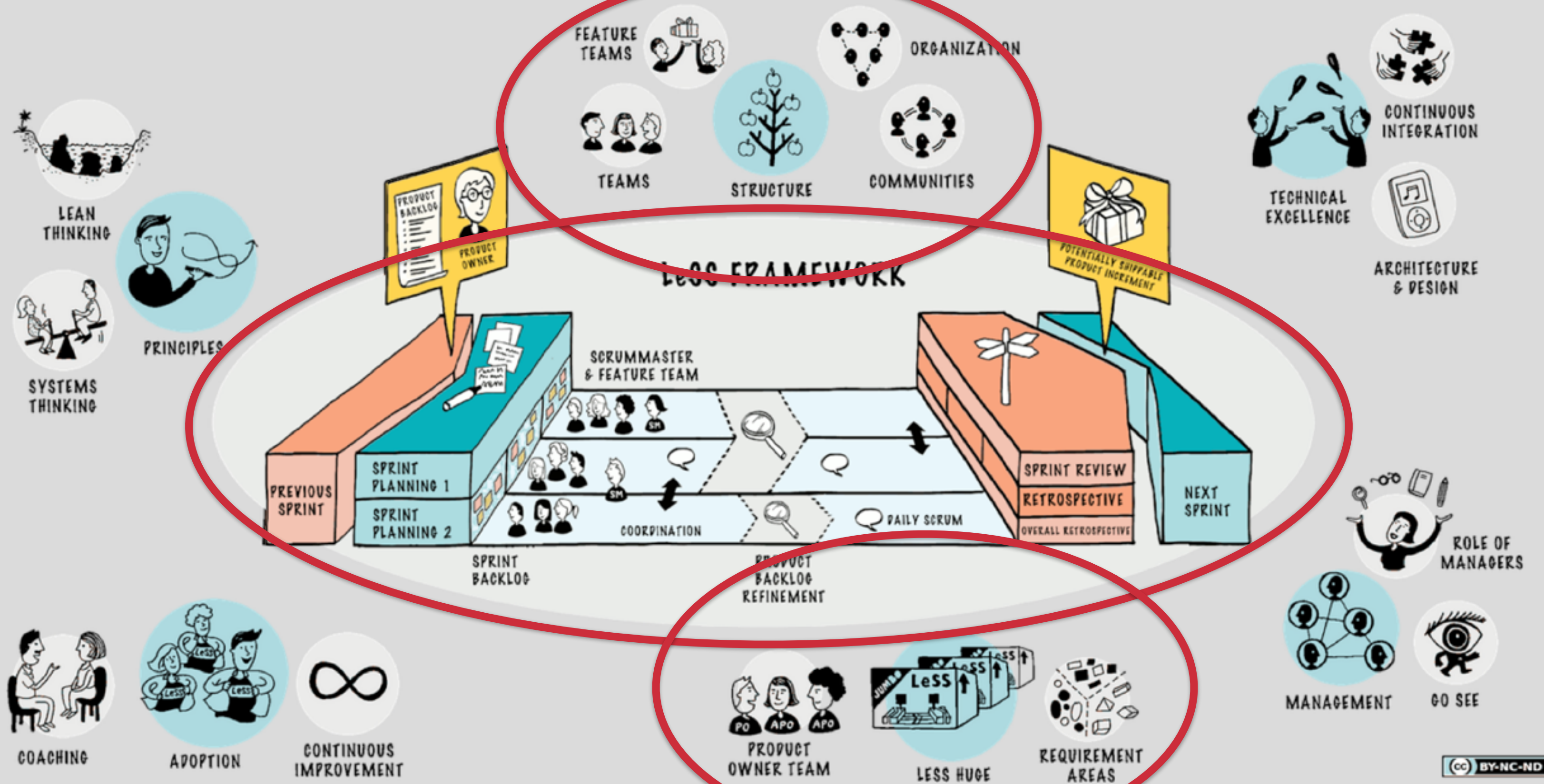
Changing “everything” in one product is the ONLY way to real change.

- Experiment and learn with limited risk
- Resources for enough support
- Moore’s chasm

Deep and narrow

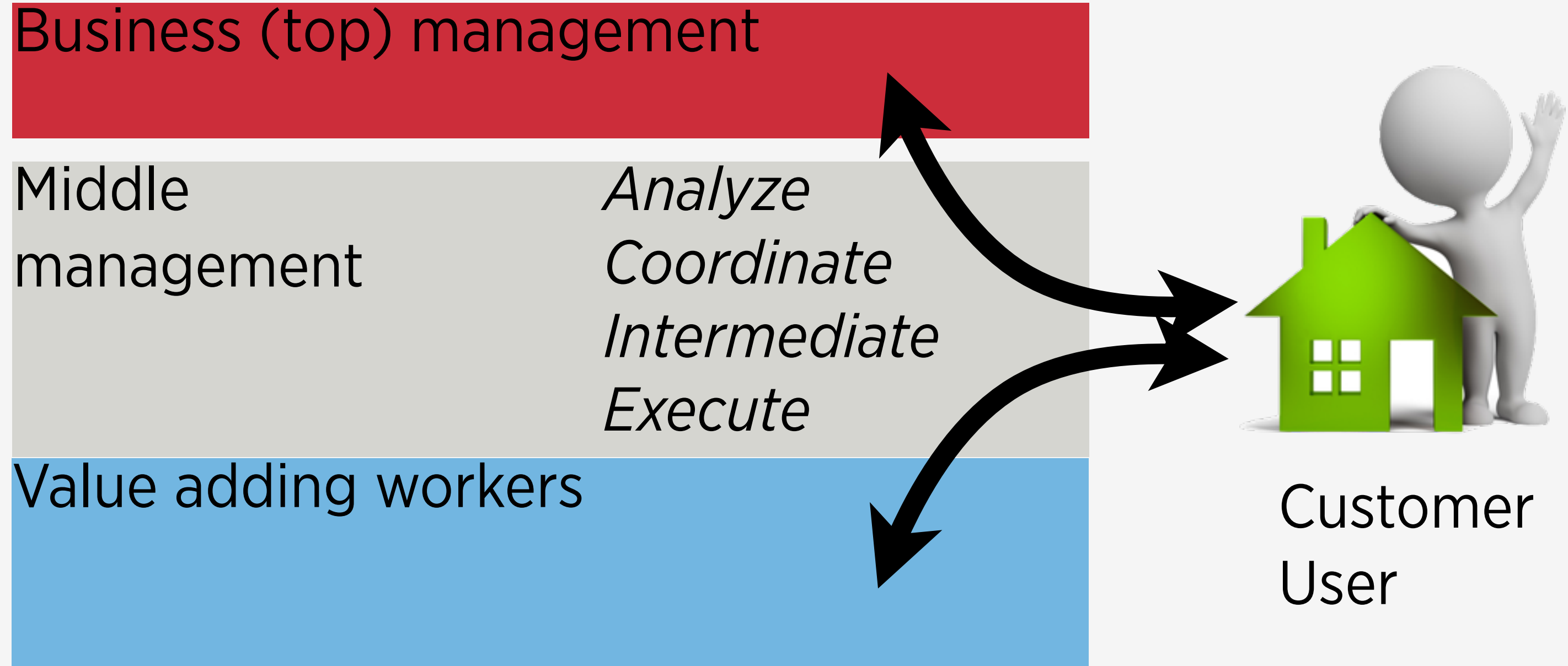


Adoption

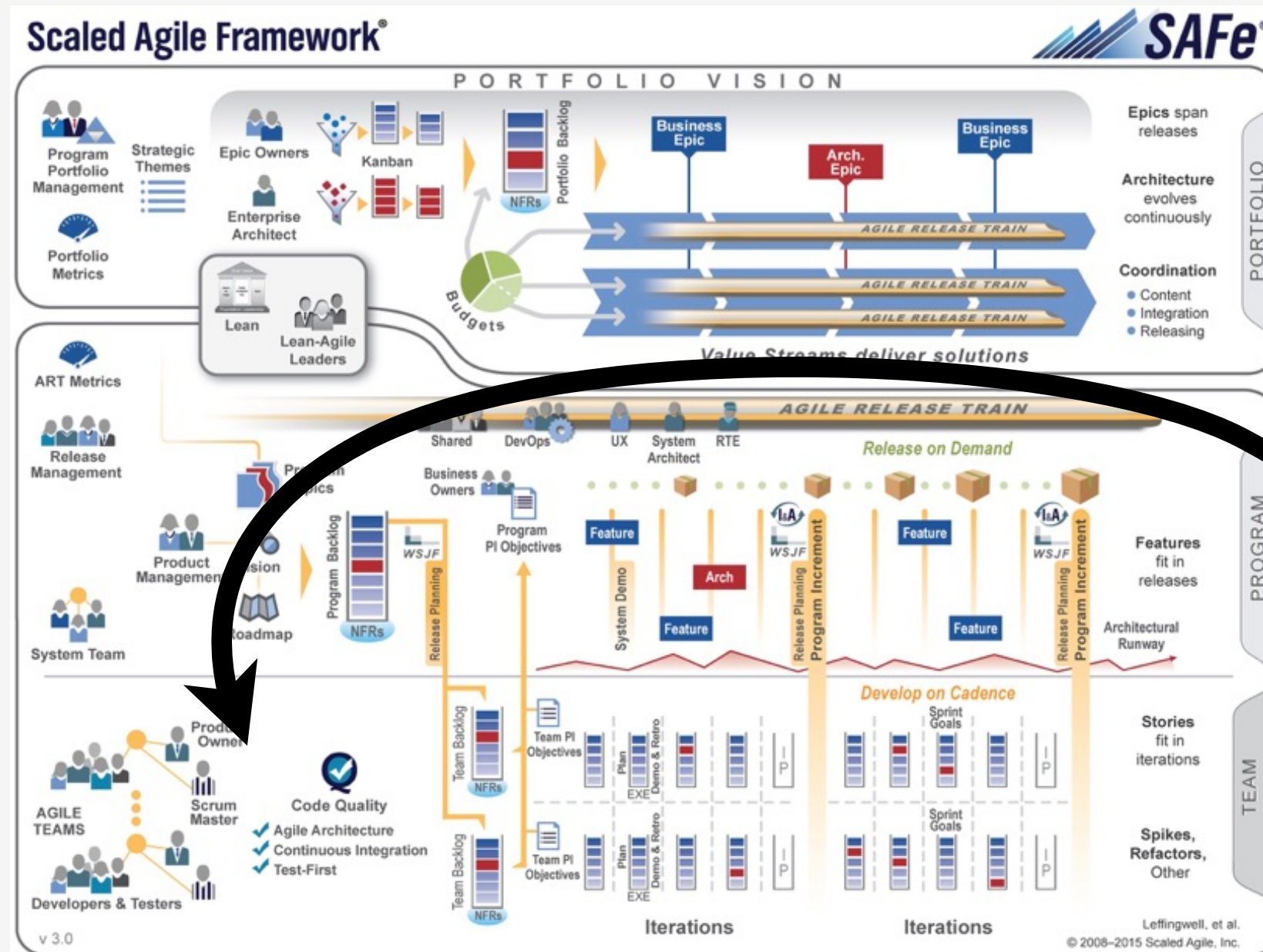


Flow of work

Who is missing?

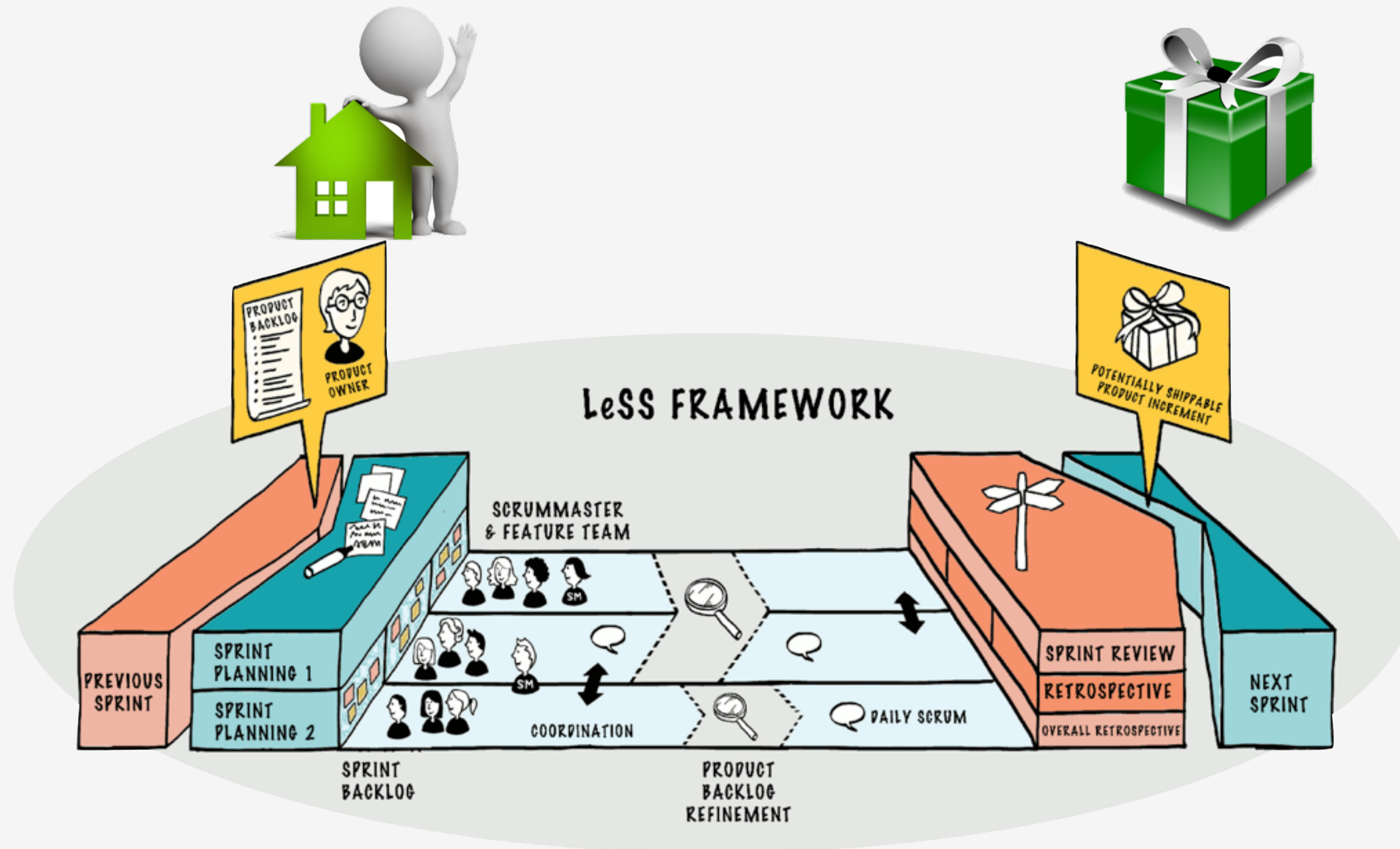


Through backlog and specialists

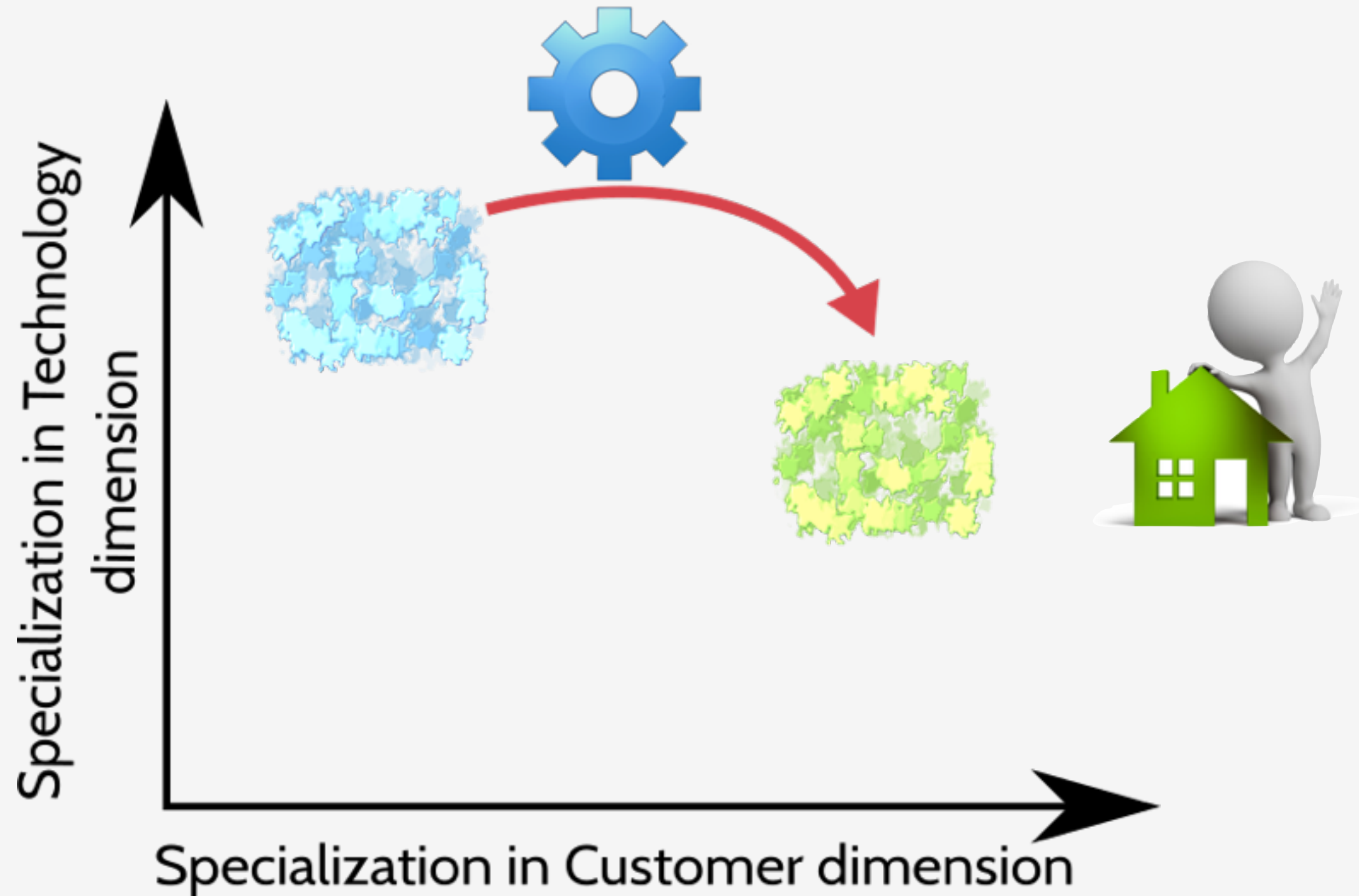


Customer
User

Flow of Work in LeSS



From Technical To Customer Specialization





Noooooooooo!
It is too simplistic.
We are so many!

Yes, simple principles drives change

New leadership, learning, structure, workflow, technology, competence, identities, interaction - “mindset and culture”

Learning causes anxiety. Only survival anxiety is greater. (E. Schein)

- Takes time, like any real change.
- There will be worry and resistance.

Leadership challenge

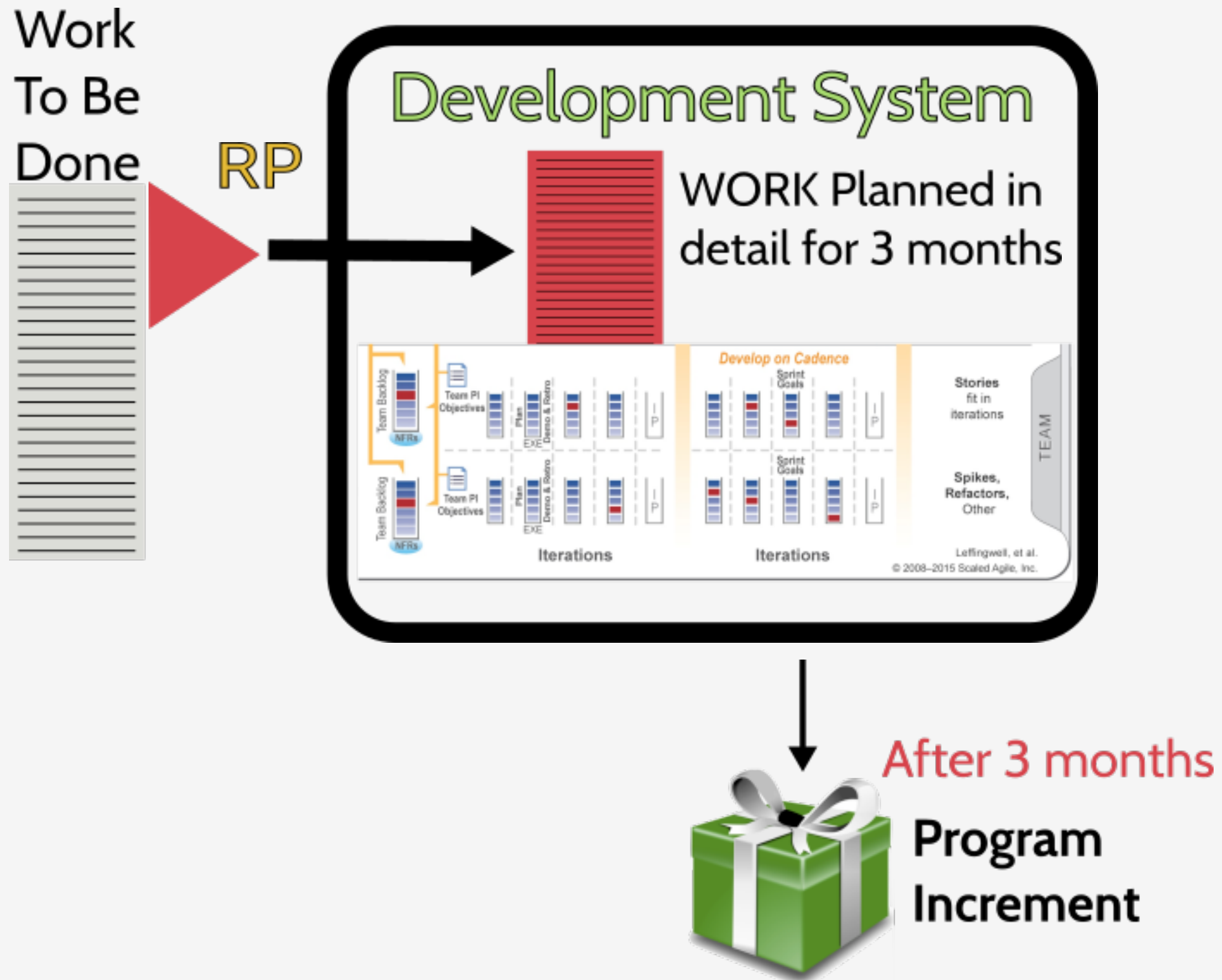
Batch size and Queues

Fundamental formula

Reach (length) of the plan = Utilization x Specialization

When coordinating the work,
the more technology-specialized the organization is
and the more you want to optimize resources (people) utilization,
the further into the future you need to plan.

SAFe Batch Size



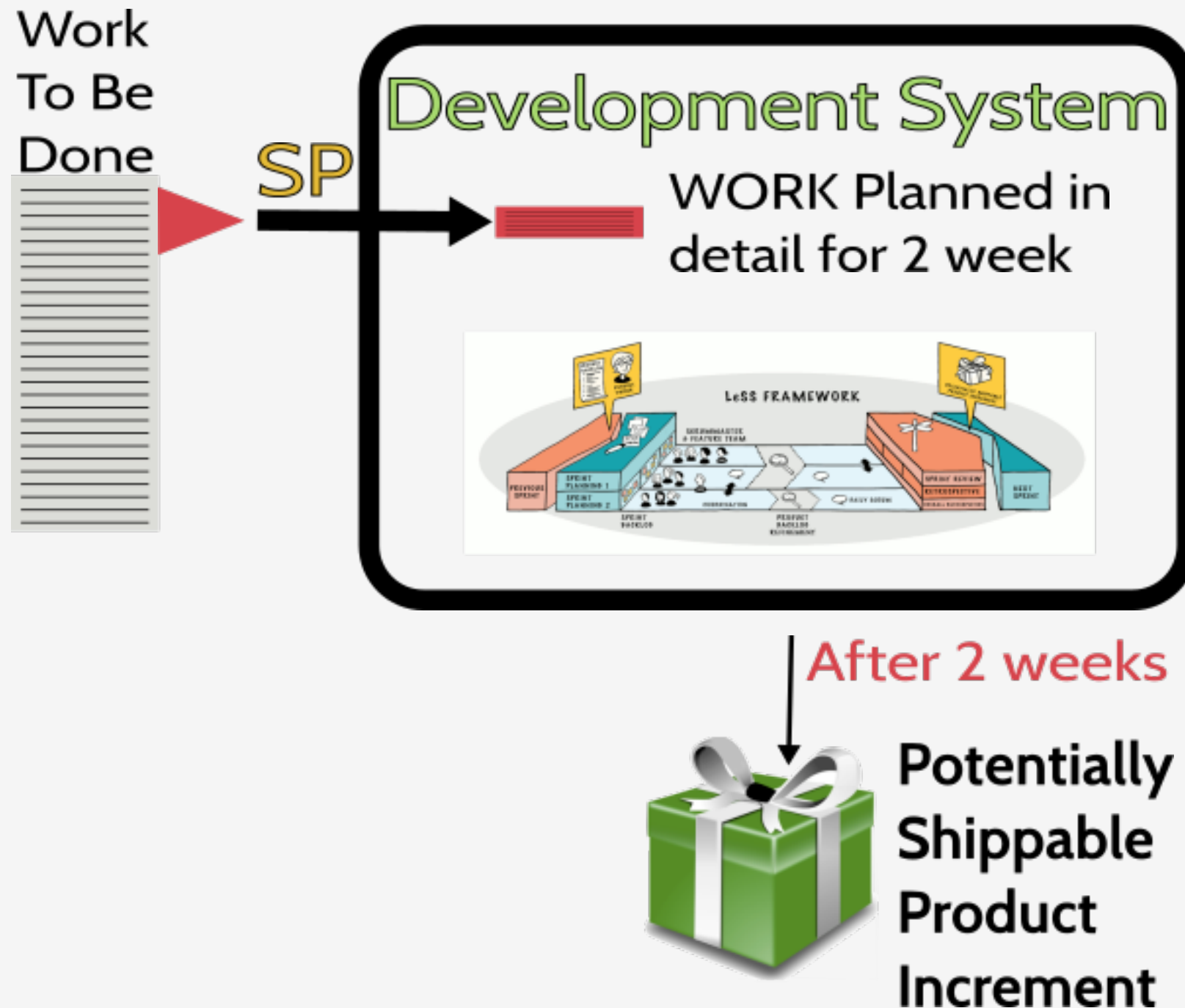
In SAFe is OK to:

Plan development for 3 months

Create big batch of work to reduce total cost

Compensate by Lean-Agile ways of working.

LeSS Batch Size

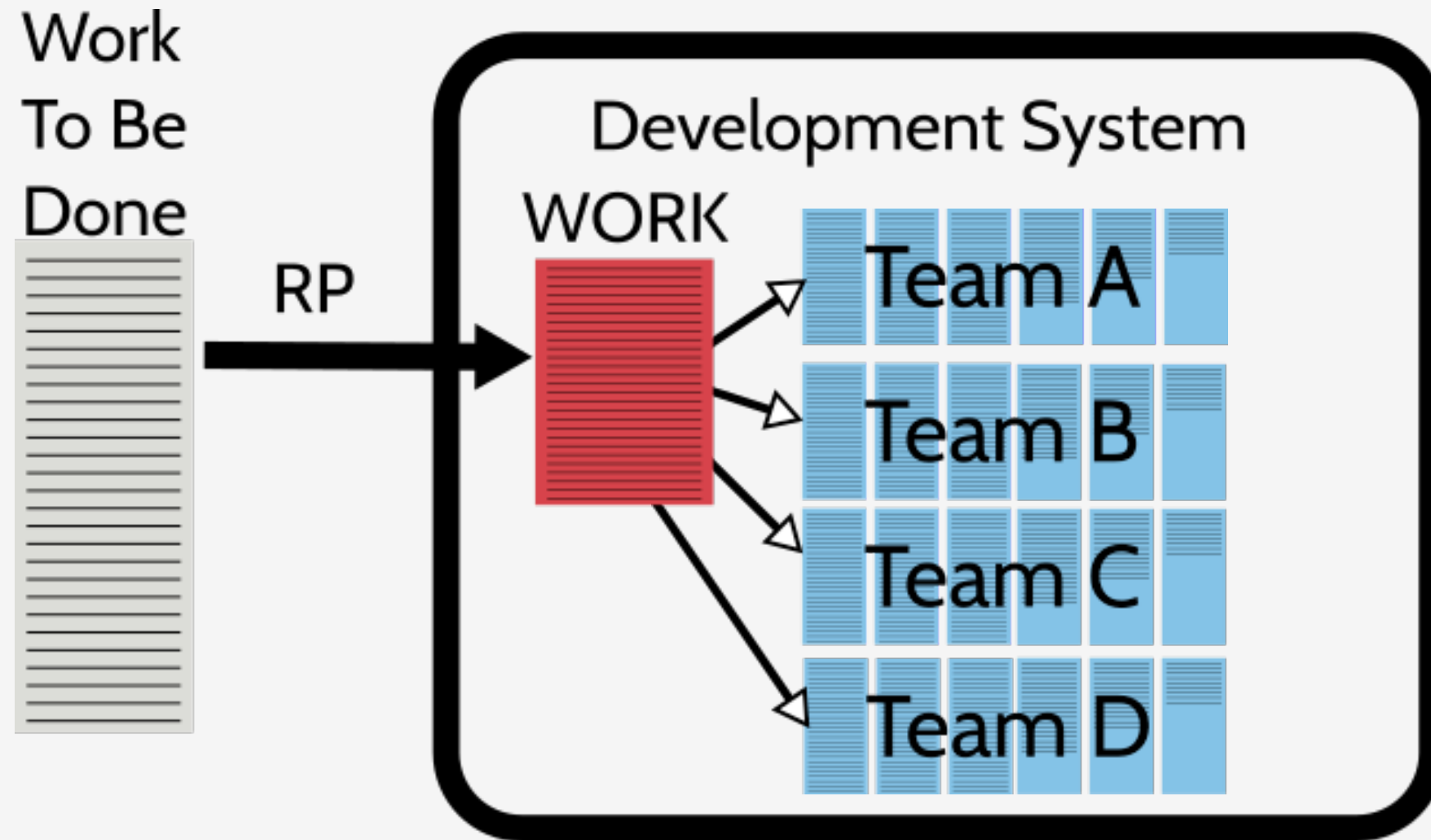


Strive and organize for:

Plan development for 2 week increments

Create small batches of work that will enable fast feedback

SAFe Queues

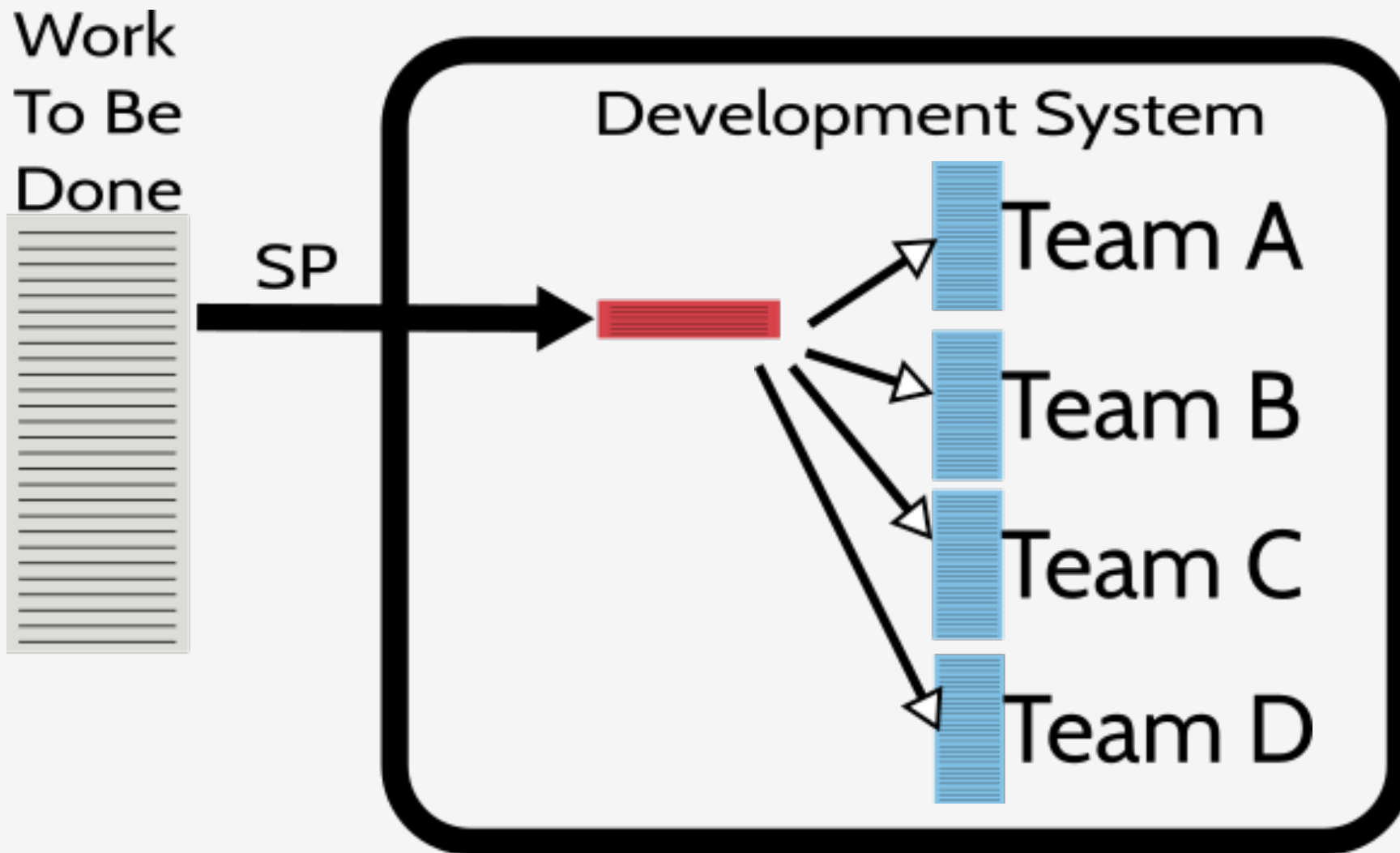


Development system
queues are filled for a
Program Increment

Optimizes resource
utilization

To cope with
dependencies

Queues in LeSS



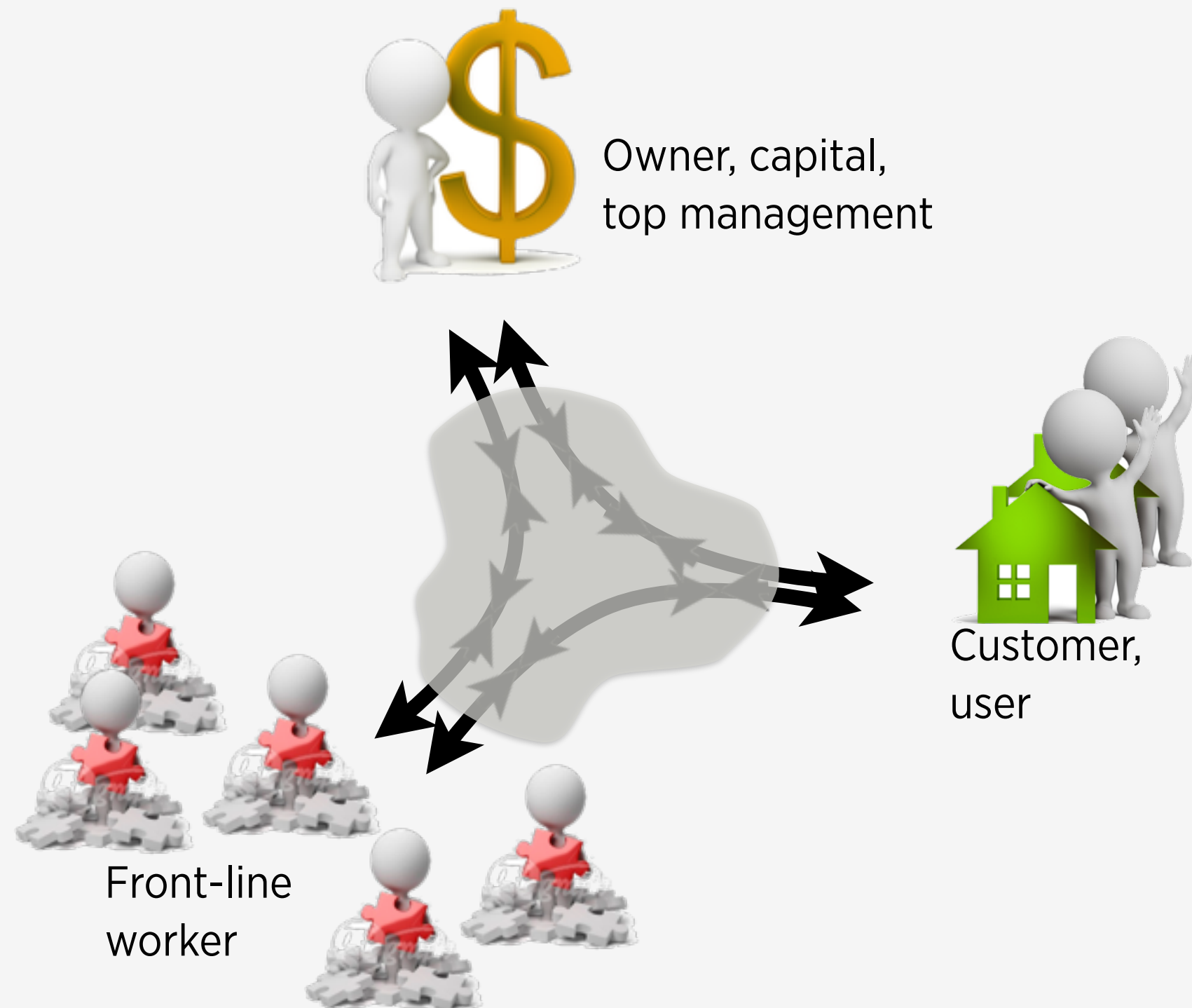
Tries to keep queues outside of the development system

Optimizes outcome after each iteration

External view

Corporate and business perspective

Growth of the middle management



From Agile Manifesto:

Individuals and interaction

Business and developers work together daily

Face-to-face conversation

Simplicity

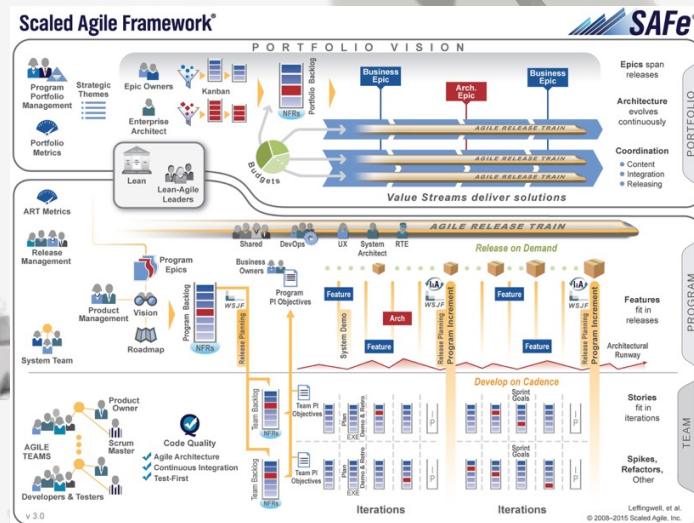
Self-organization

Learning from reality

1. Process and best practises by SAFe



Owner, capital,
top management



Front-line
worker



Customer,
user

From Agile Manifesto:

Individuals and interaction

Business and developers work
together daily

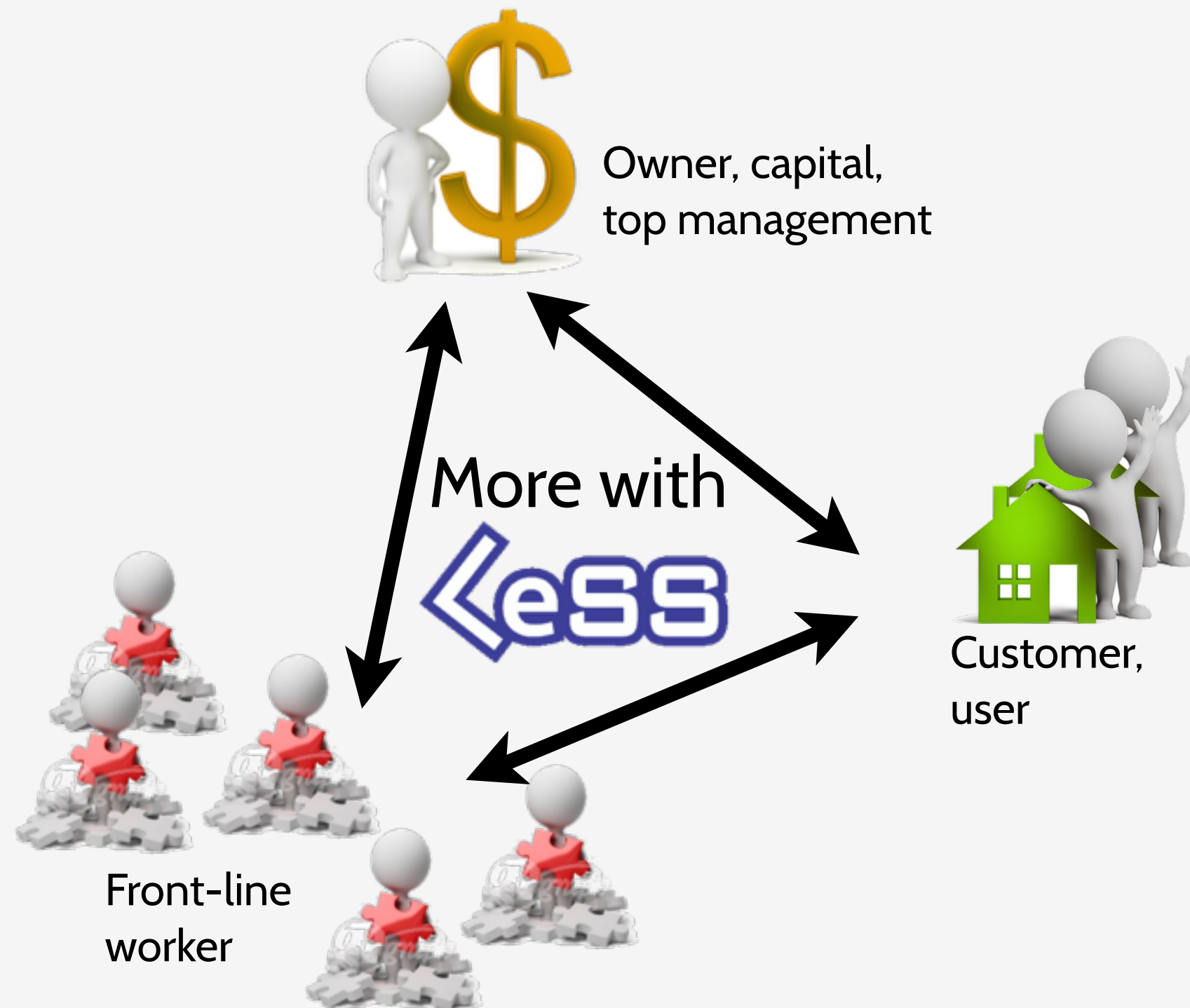
Face-to-face conversation

Simplicity

Self-organization

Learning from reality

2. Dis-intermediating by LeSS



From Agile Manifesto:

Individuals and interaction

Business and developers work together daily

Face-to-face conversation

Simplicity

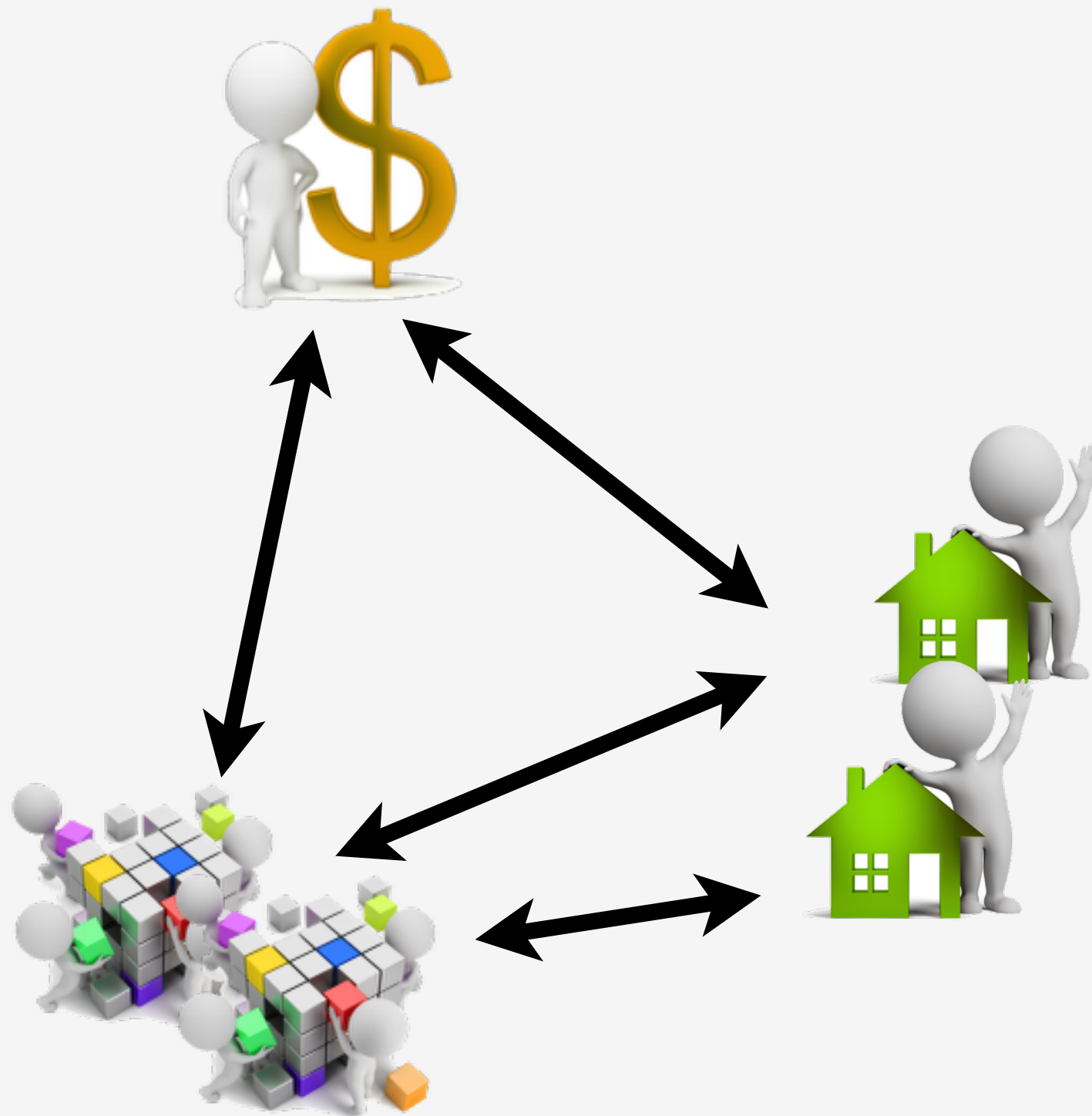
Self-organization

Learning from reality



Noooooooooo!
It will break!

LeSS Organizational design

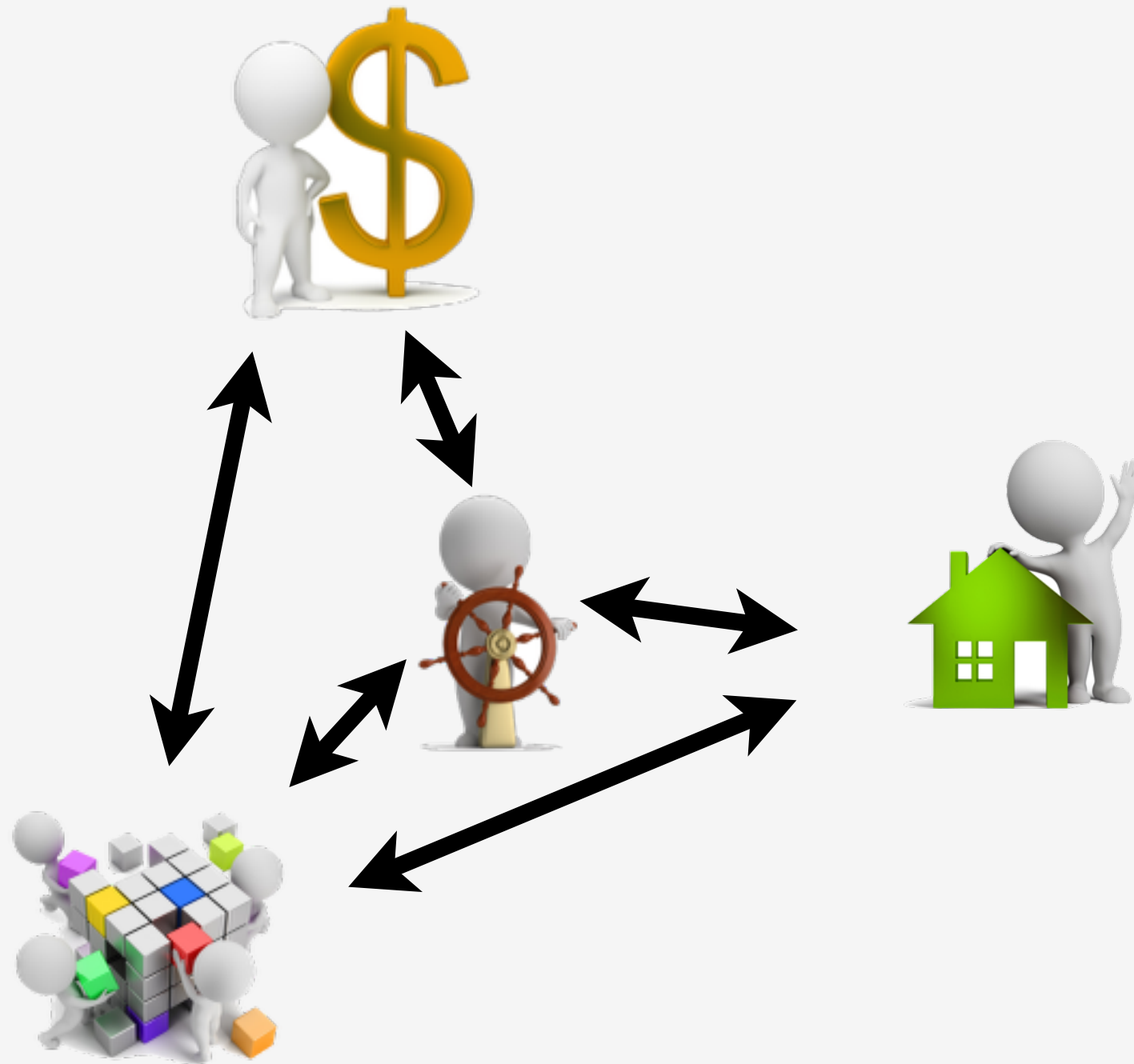


Define your product to enable direct customer interaction.

Build customer-oriented feature teams.

Learning away from coordination chaos. Decoupling in practise.

LeSS Organizational design



Find your product to enable direct customer interaction.

Build customer-oriented feature teams.

Learning away from coordination chaos. Decoupling in practise.

The Product Owner decides, customer interaction clarifies.

The line management grows the value of the organization.

Taylorian or Agile

Two attractors - (for Open Space)

Traditional, Taylorian

Linear separation, Conservative

Prediction

Task specialization, theory X

Execution, Resource efficiency

Queuing & Batching

Coordination, bureaucracy (Management)

Fragmented organization, overspecialized people

Alienation

Agile, Lean

Complex adaptive, Explorative

Transparency

Customer - orientation, theory Y

Value, flow efficiency

Learning, feedback (Leadership)

Continuous integration/delivery

United organization, T-shaped people,

Ownership of the whole

**Coordination
Chaos**

**Creative
Chaos**

Confusion

Inconsistent practices

Transitory state

Specific frameworks

	SAFe	LeSS
Slogan	Program Execution	Customer-centric Learning
Framed problem	Internal efficiency	Agility
Value proposition for “Scaling Agile”	Improved coordination (program execution) Lean-Agile ways of working	Effective and agile value-adding work More with LeSS
Solution	Program process Lean-Agile best practises Portfolio coordination	Organizational design: principles, guides, rules and 600 experiments for inspect and adapt
Control mechanism	Bureaucratic. Cope with specialization by better coordination.	Market, Clan. Scale down for intimate contact of designers, customers and top management.
Adoption scope	Program level / one layer	One product first, deep and narrow.