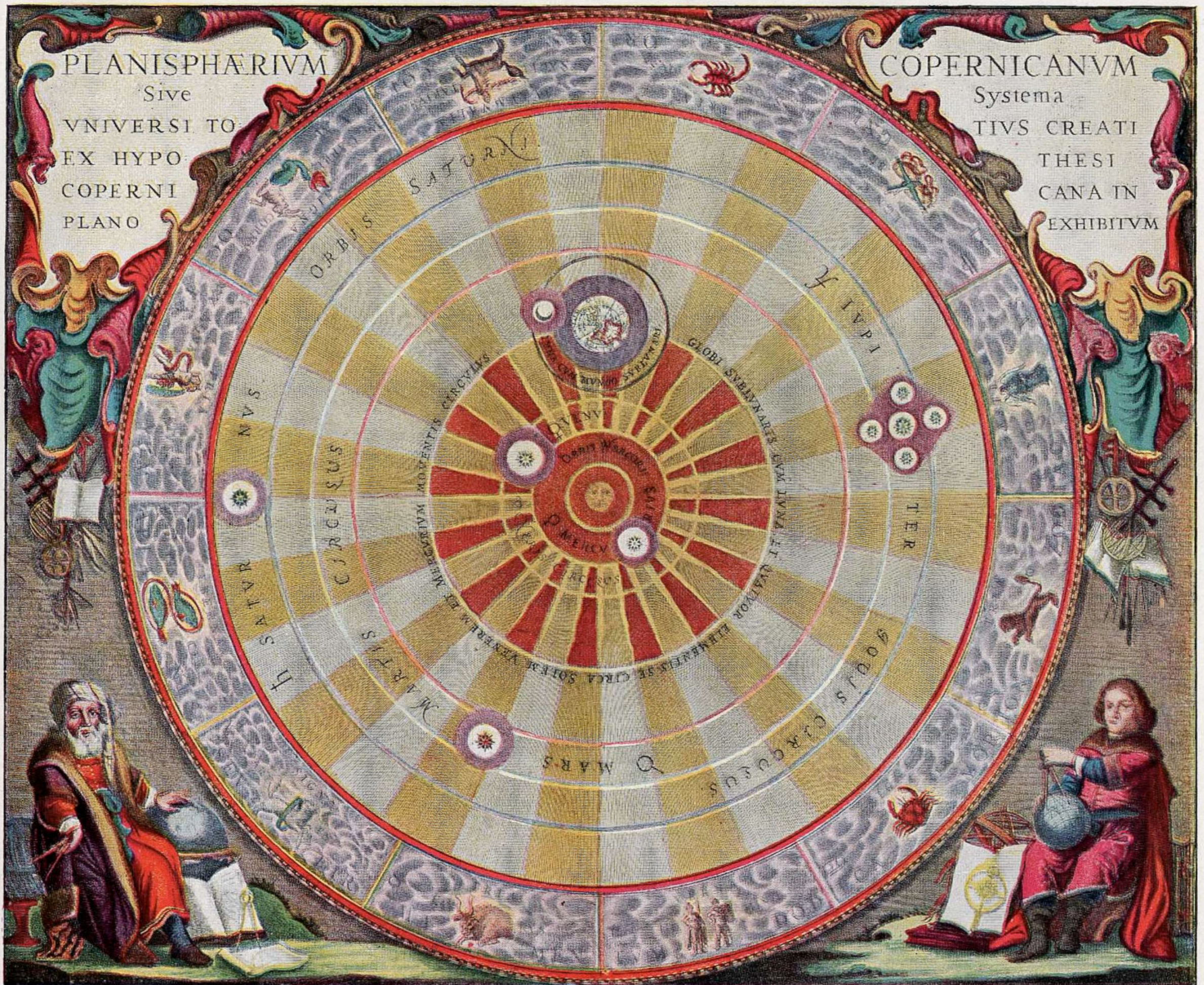


PLANISPHERIVM

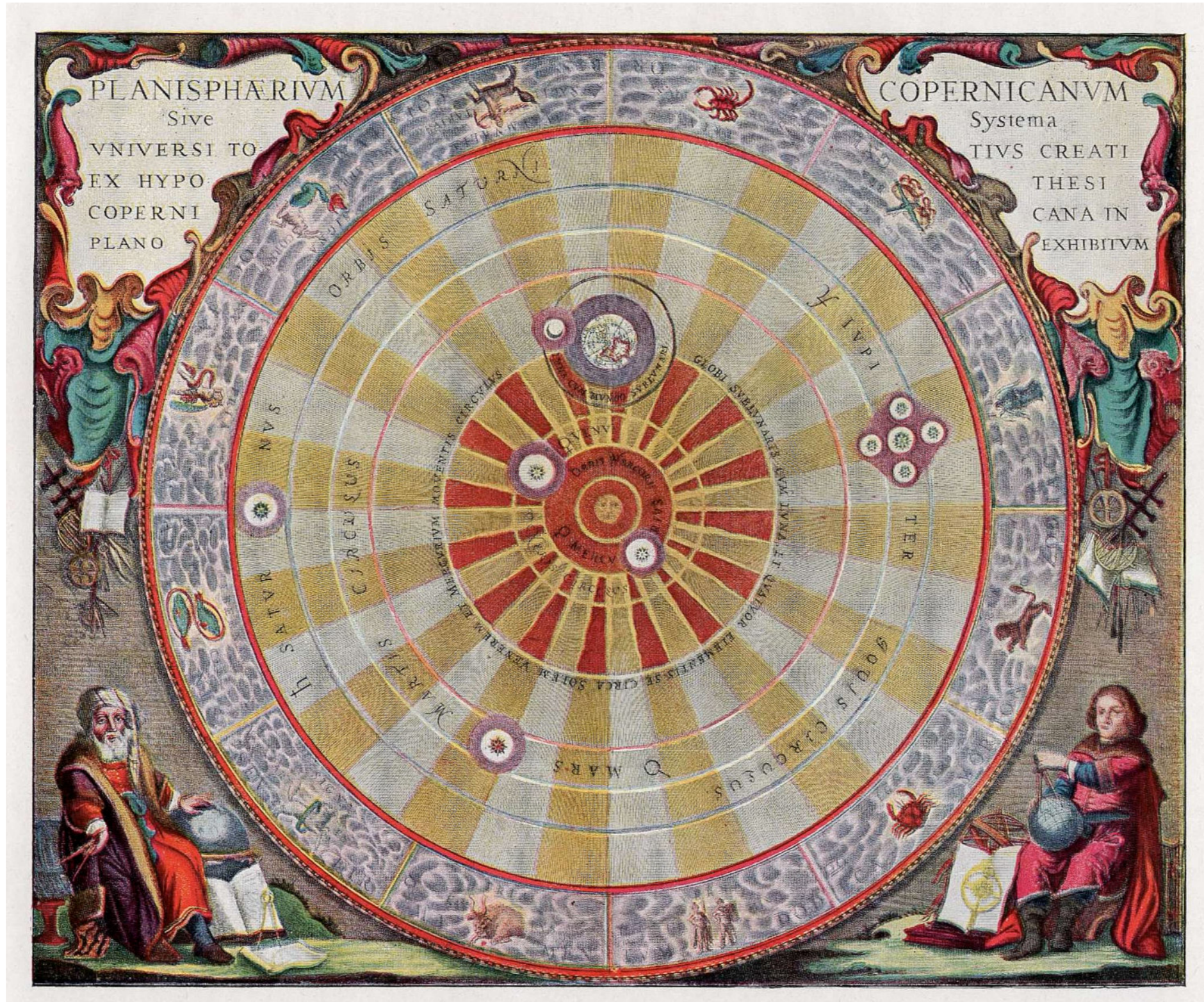
Sive
VNIVERSI TO-
EX HYPO-
COPERNI
PLANO

COPERNICANVM

Systema
TIVS CREATI
THESI
CANA IN
EXHIBITVM



STATIK Beyond the Classroom: Adopting Systems Thinking with Powerful Simplicity



The Systems Thinking Approach to Introducing Kanban

1. Purpose of the Service
2. Sources of Dissatisfaction
3. Demand Analysis
4. Capability Analysis
5. Workflow Mapping
6. System Design
7. Socialize

Systems Thinking

Your organization is an ecosystem of interdependent services, a **complex adaptive system**.

You introduce Kanban such that the complex system will be stimulated to improve.

The **Systems Thinking** Approach to Introducing Kanban is how you make this transition more successful.

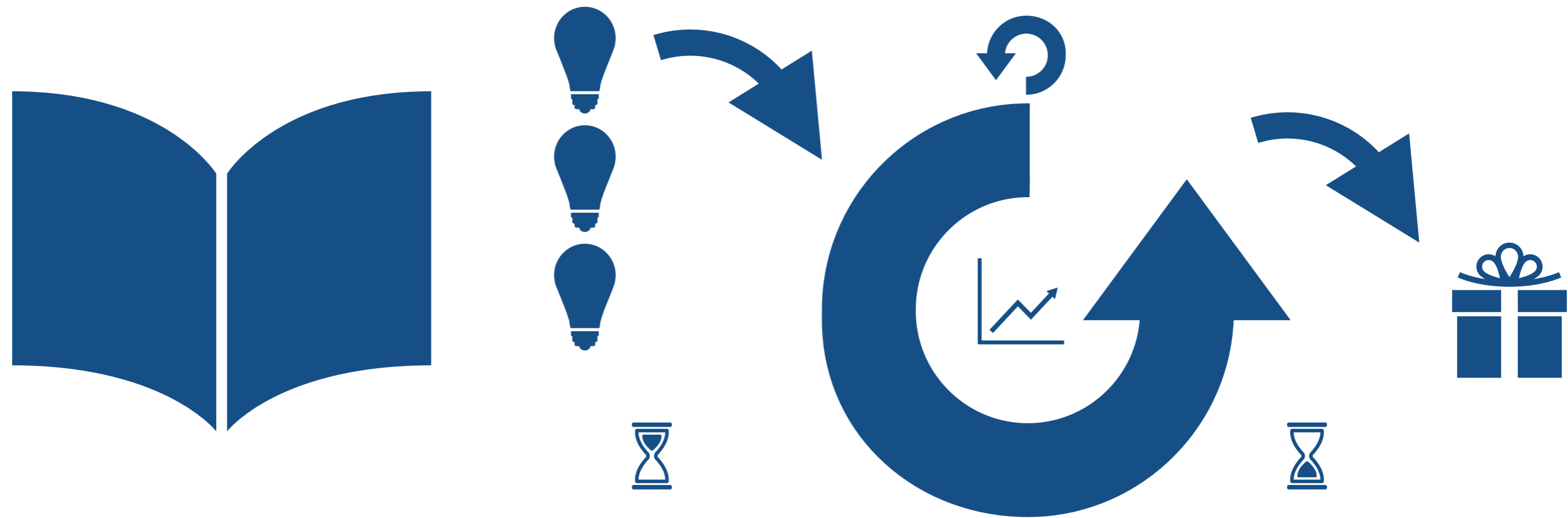
-A. Zheglov

Complex Adaptive System

The observed behaviour of individual parts* is not predictive of the behaviour of the whole system.

**i.e. Agile teams*

Optimization of parts leads to the sub-optimization of the whole.



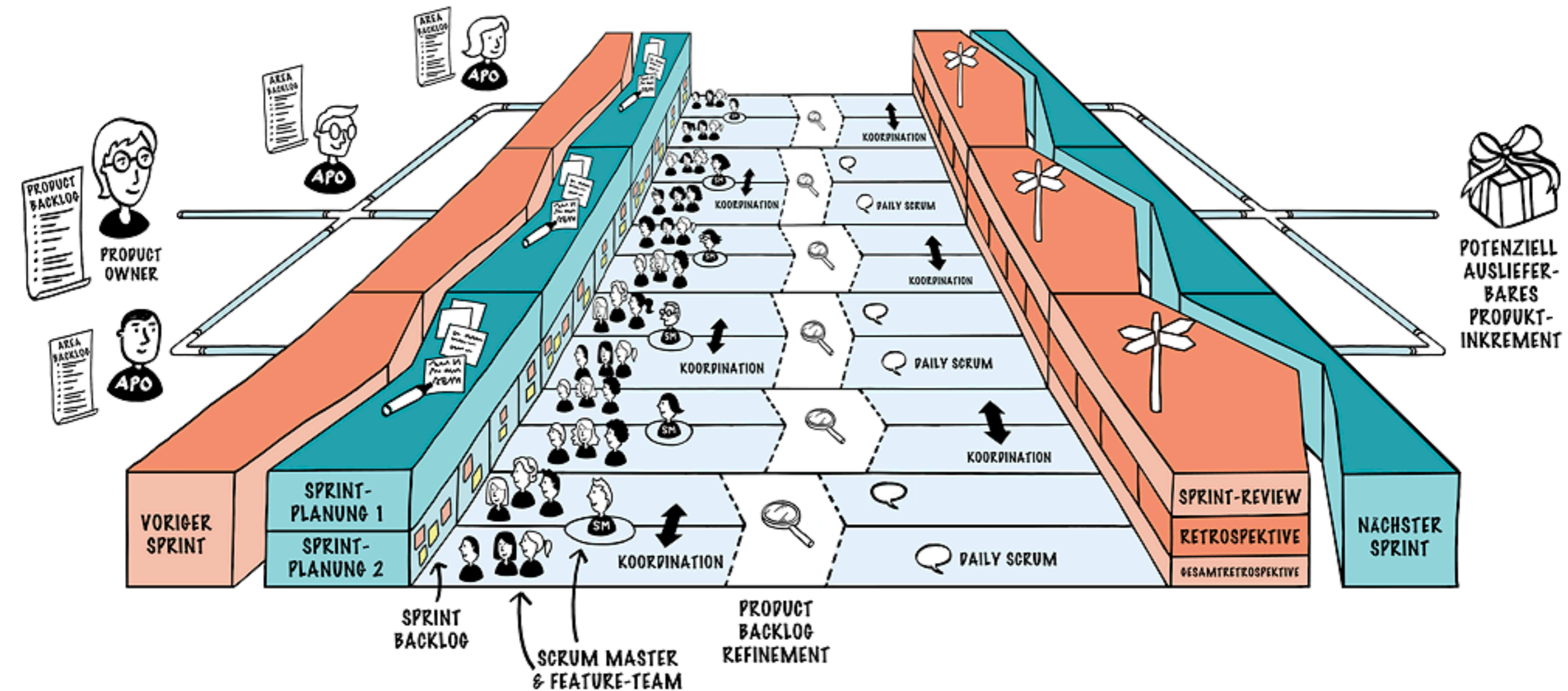
Complex Adaptive System

Dynamic networks of interactions;

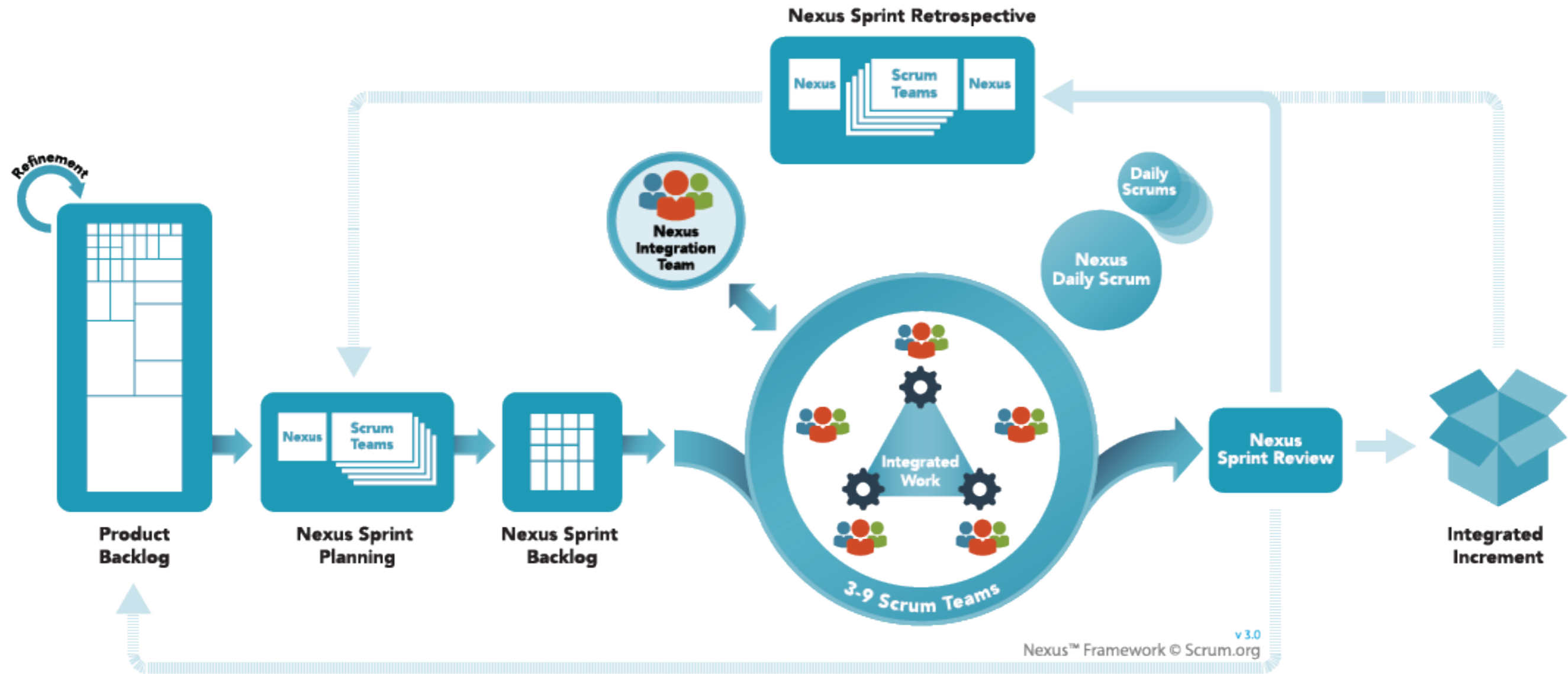
Relationships are **not aggregations** of the individual static entities*;

**i.e. “Scaled Agile”*

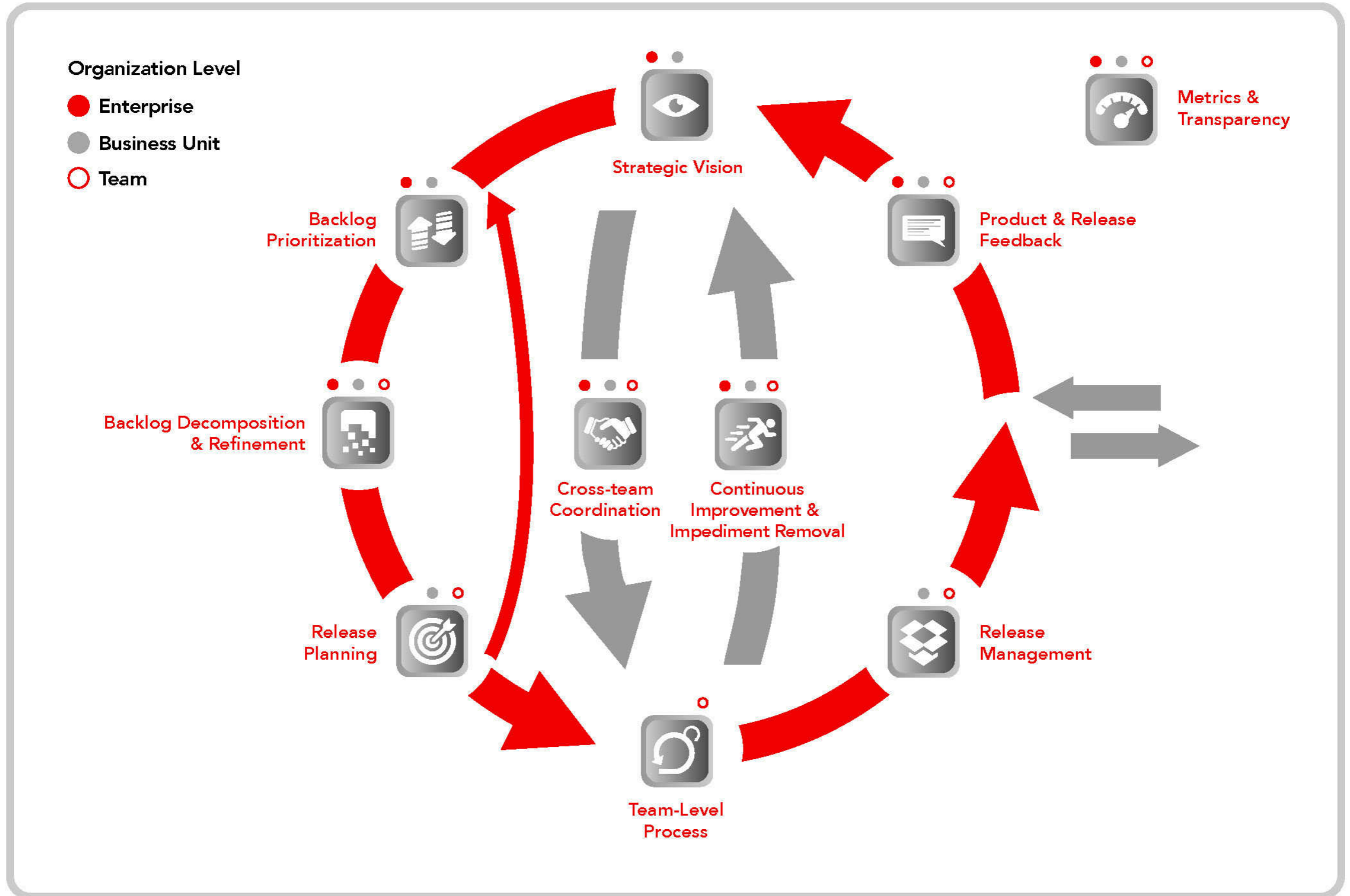
But aggregations are so tantalizing...



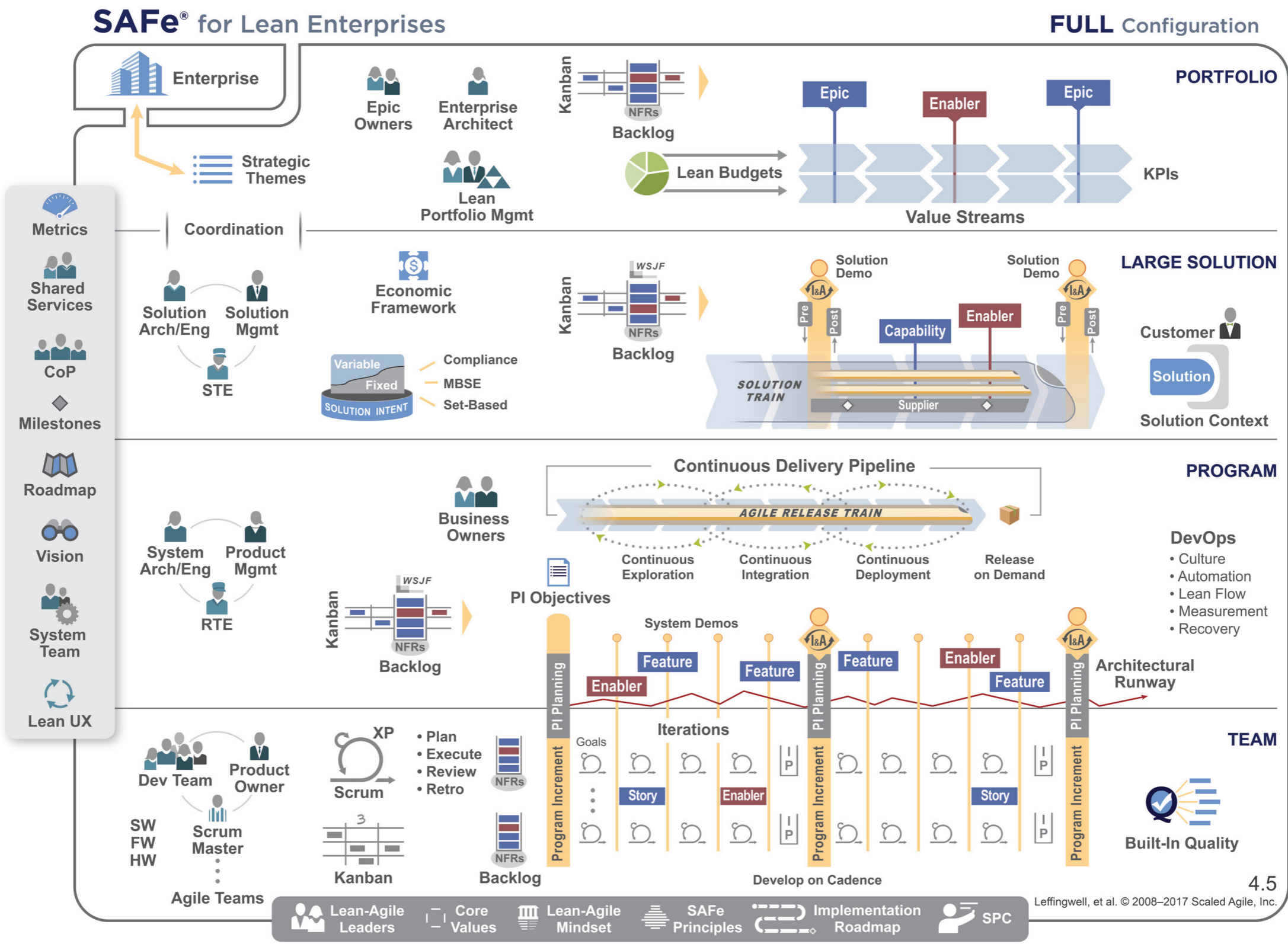
But aggregations are so tantalizing...



But aggregations are so tantalizing...



But aggregations are so tantalizing...





Complex Adaptive System

Individual and collective behaviour mutate & self-organize* in order to adapt to the changes in their environment and increase their survivability.

*i.e., not necessarily into Scrum Teams with ScrumMasters, Sprints and Story Points.

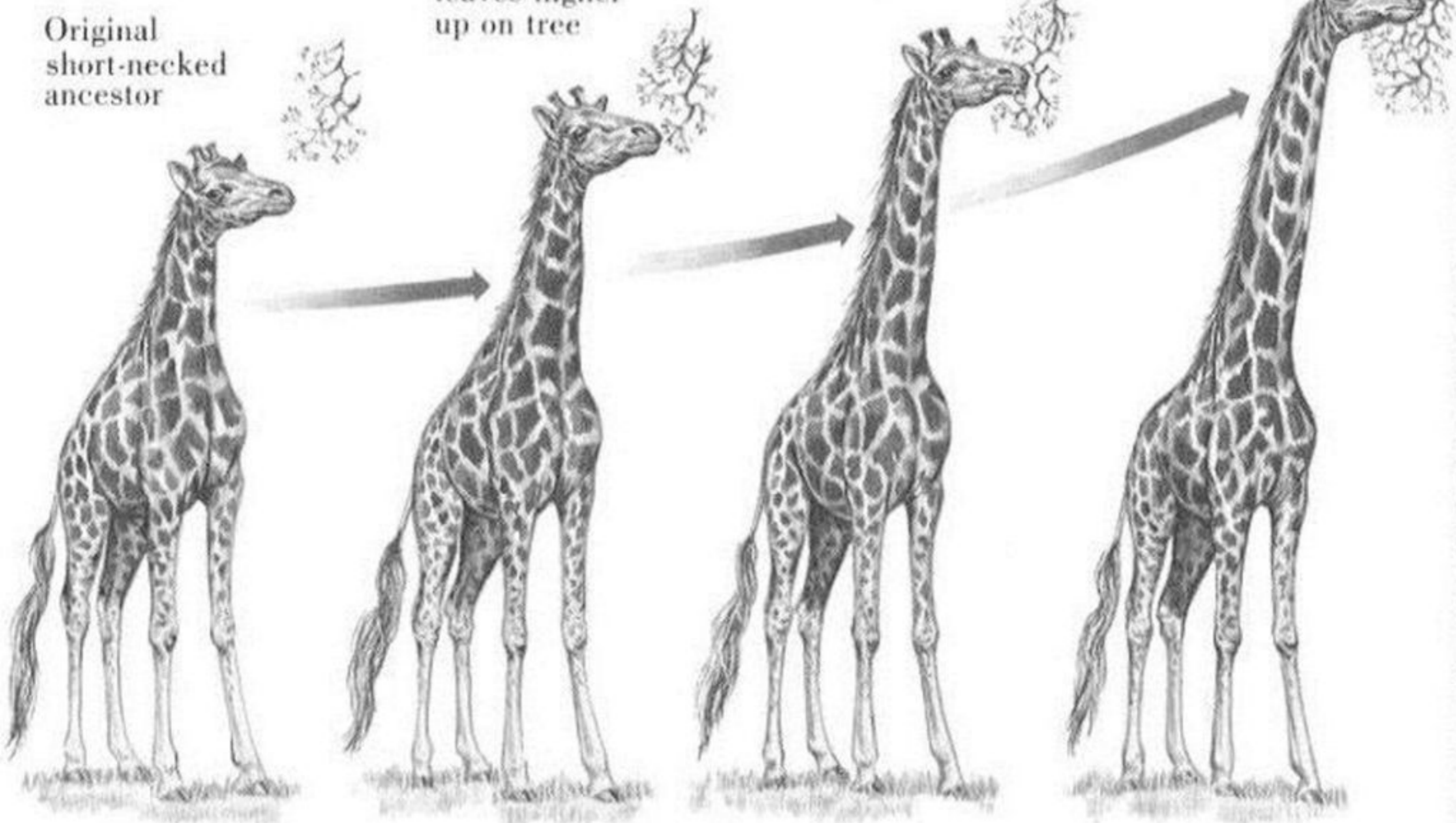
LAMARCK'S GIRAFFE

Original short-necked ancestor

Keeps stretching neck to reach leaves higher up on tree

and stretching

and stretching until neck becomes progressively longer



Driven by inner "need"

The Need for Change

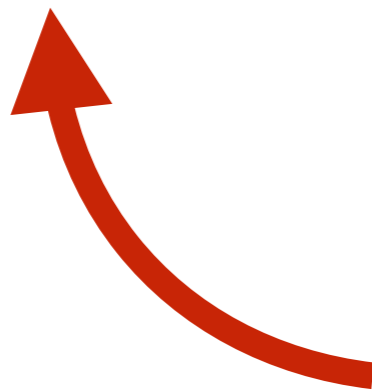
Our customers are dissatisfied.



Let's reorg around Scrum Teams.

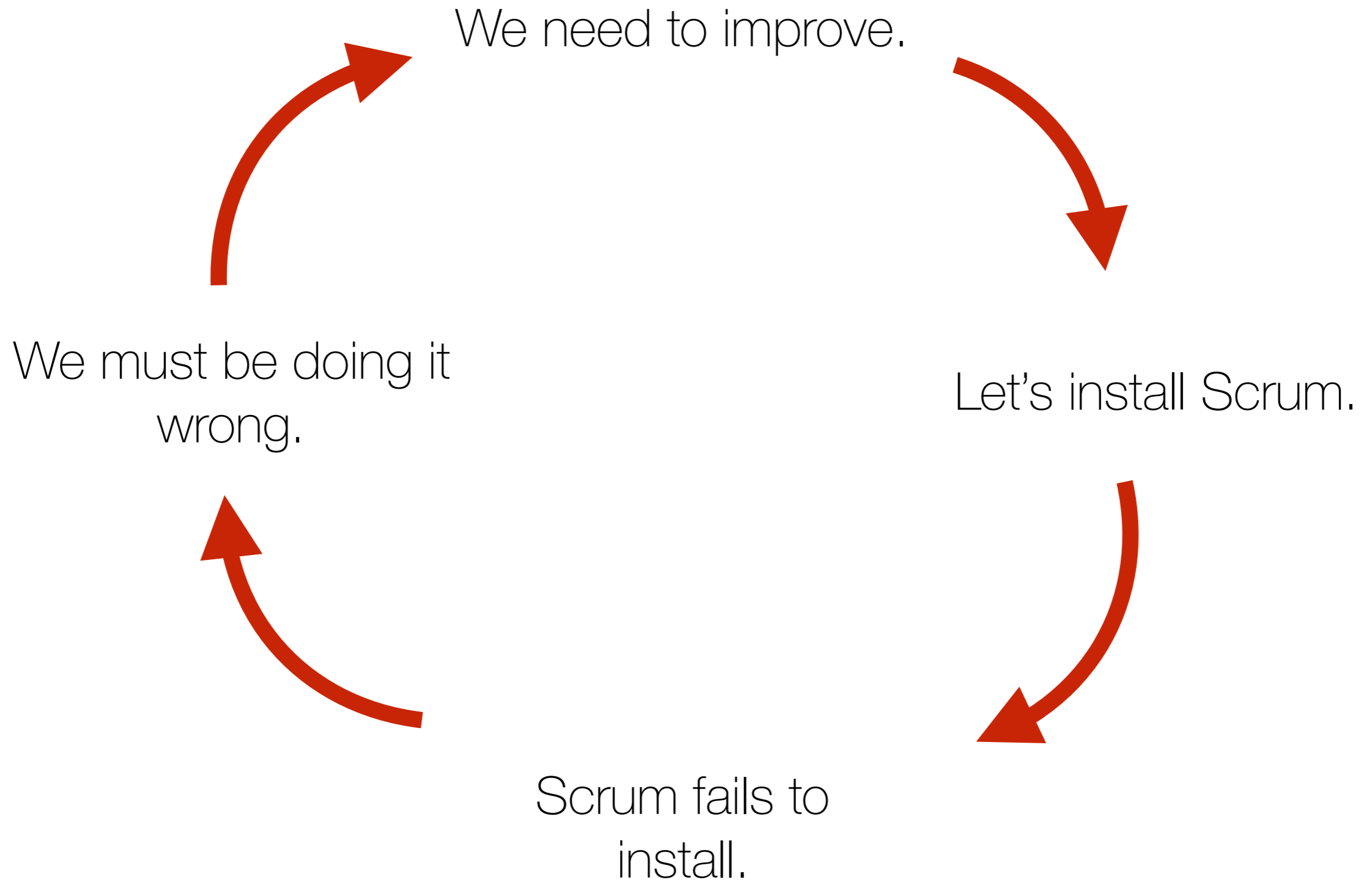


We need to focus on making teams more effective.

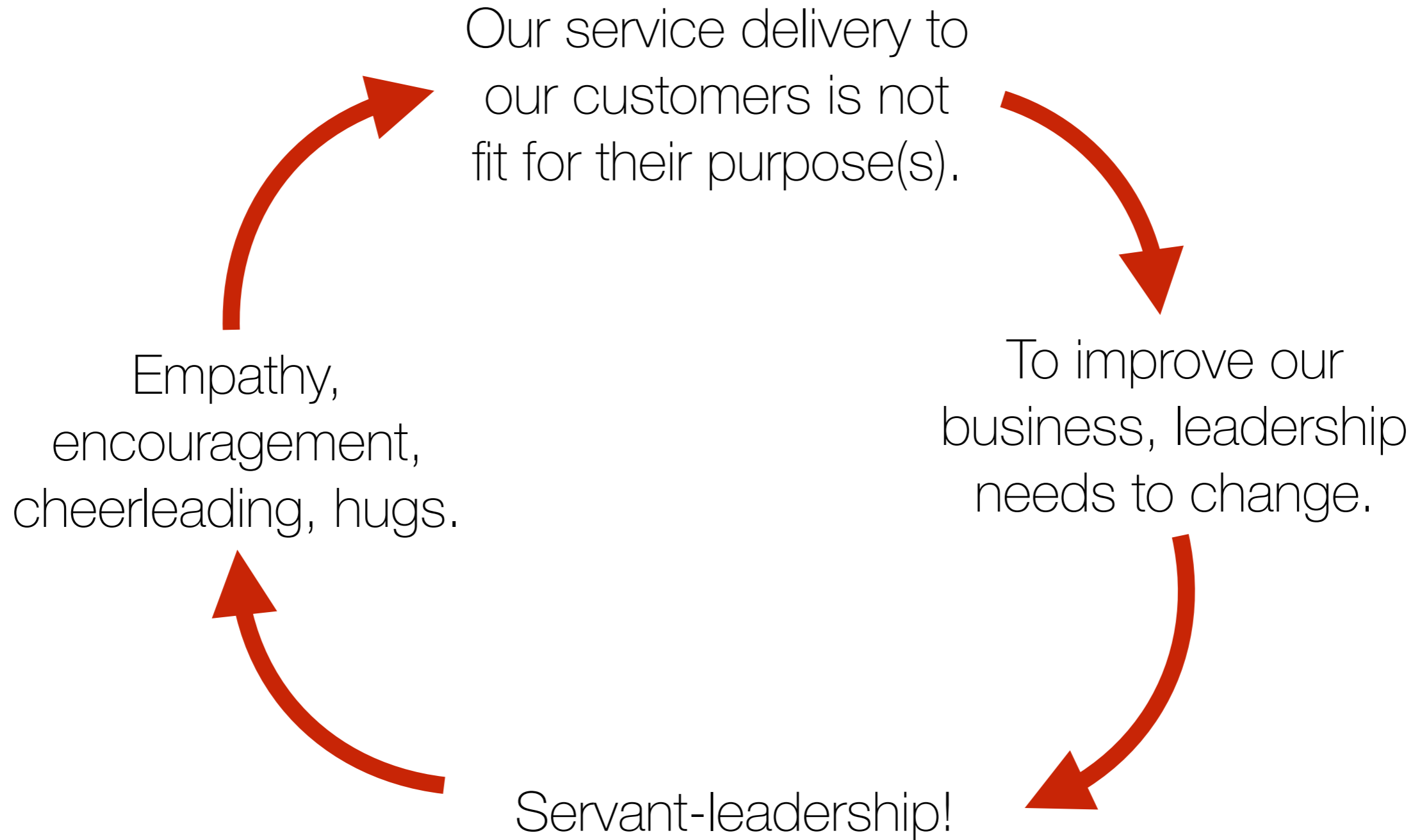


Scrum teams aren't solving all of our problems.

Install Scrum



Leadership Change



Services: What We Do for Our Customers



Services: What We Do for Our Customers



Big Fix

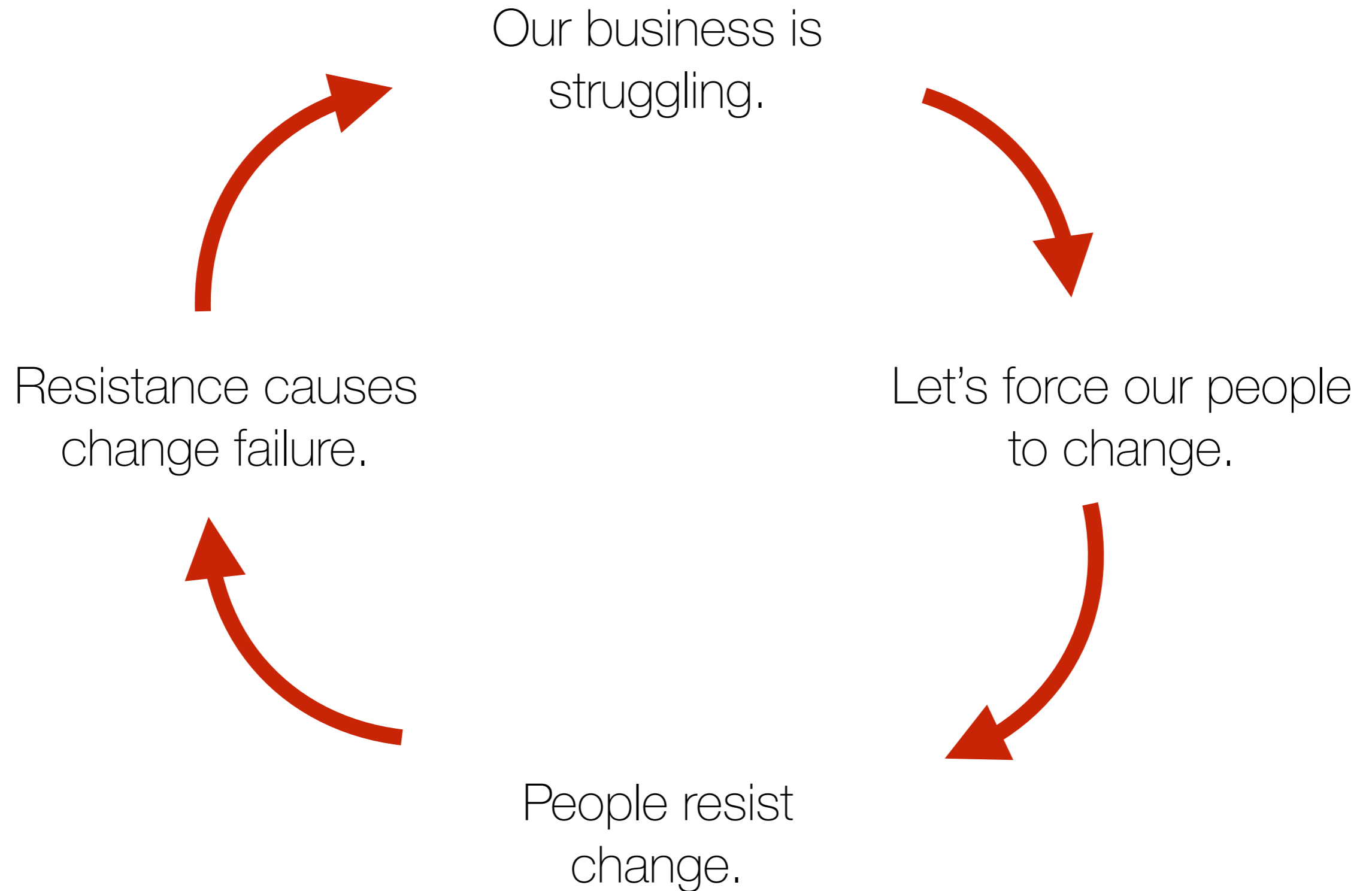
We are losing market share to our younger, faster, cheaper competition.

We must have the wrong people: complacent, not aligned.

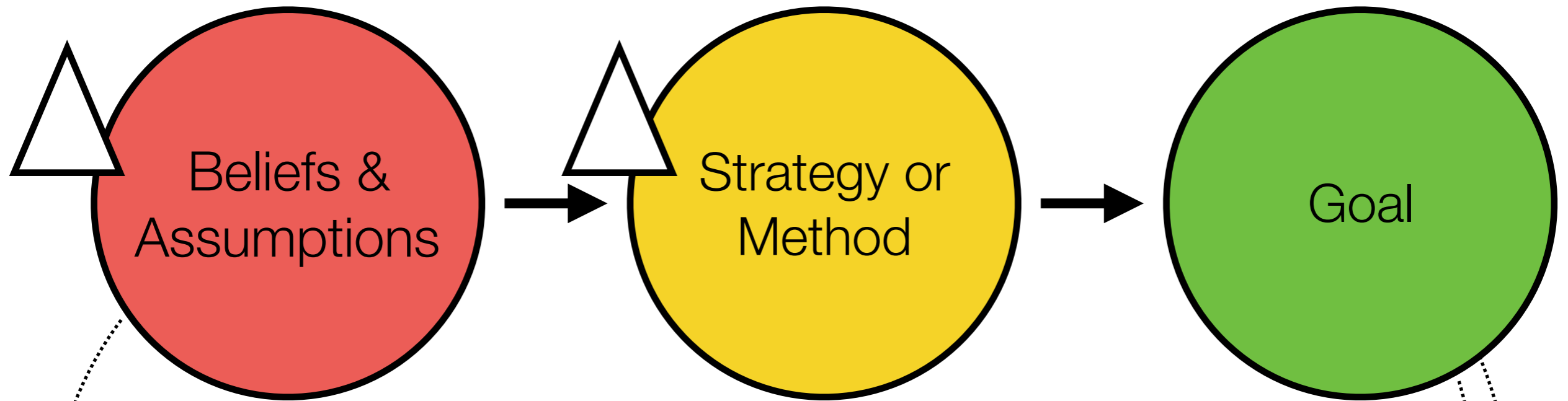
Let's go Agile.

Huge "transformation" J-curve: deep, long, expensive, painful.

Big Change with Humans



How Thinking Really Changes



Double Loop Learning

Change in course of action decided by rethinking the initial goal and reevaluating beliefs and assumptions.

Single Loop Learning

Change in course of action expected to achieve initial goal.

Systems Change as Thinking Changes



STATIK Changes Thinking

1. Purpose of the Service
 2. Sources of Dissatisfaction
 3. Demand Analysis
 4. Capability Analysis
 5. Workflow Mapping
 6. System Design
 7. Socialize
- 

How can a Kanban initiative "take hold" and how can STATIK be used to drive ongoing improvement?

Values

Transparency

Balance

Collaboration

Customer Focus

Flow

Leadership

Understanding

Agreement

Respect

Agendas

Survivability

Service-Orientation

Sustainability

Principles

Start with what you do now

Agree to pursue evolutionary change

Encourage acts of leadership at all levels

Understand & focus on customer needs & expectations

Manage the work, let people self-organize around it

Evolve policies to improve outcomes

Practices

Visualize

Limit WIP

Manage Flow

Make Policies Explicit

Implement Feedback Loops

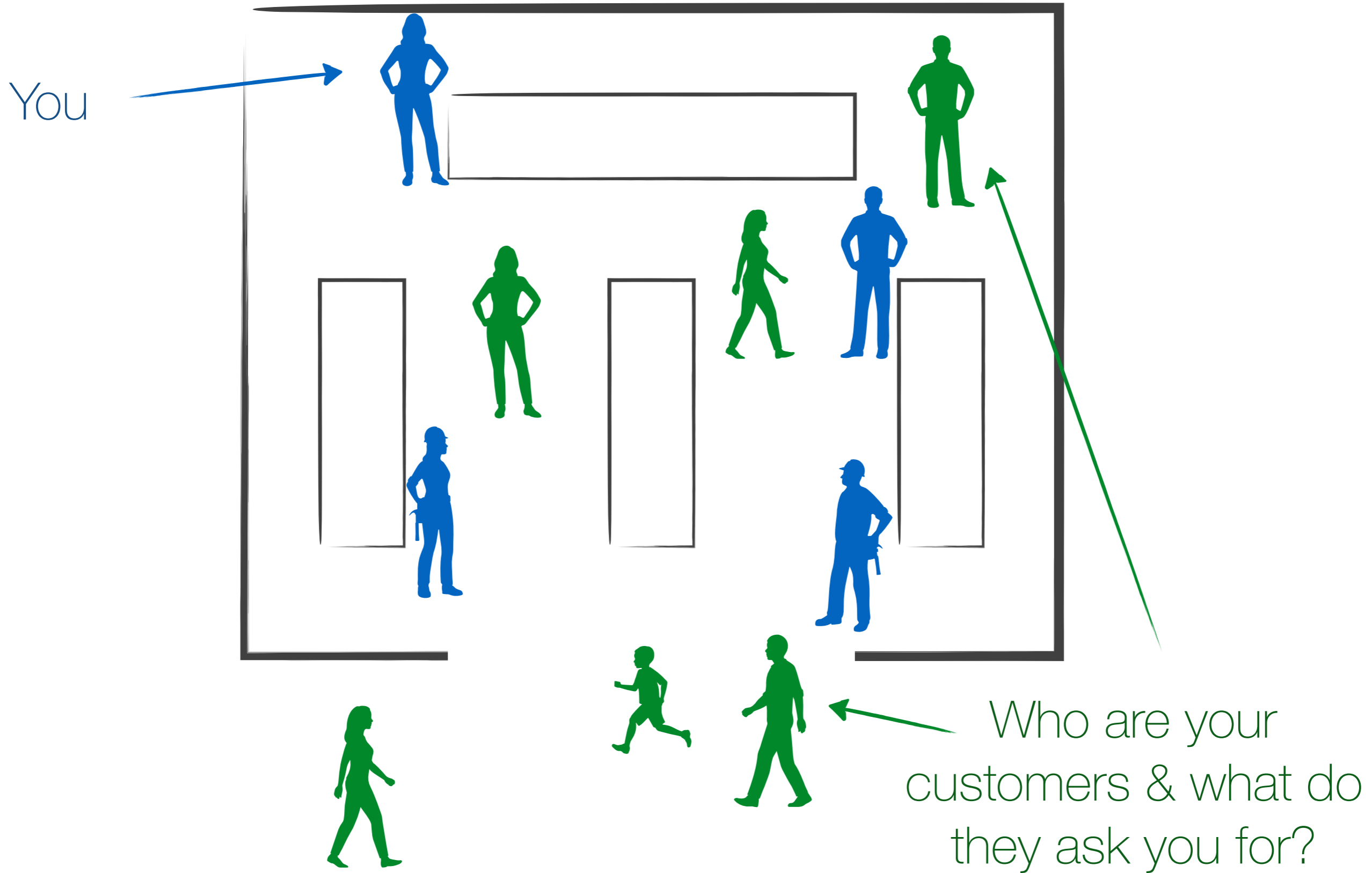
Improve Collaboratively, Evolve Experimentally

Powerful Simplicity

Your Service As a Shop



Your Service As a Shop



Demand Matrix

Type	Source	Destination	Arrival Rate	Pattern	Expectations
Deliverable Request	Requestor	Benefactor, Receiver	Of requests, <u>not</u> promises	Random, Regular, Predictable, Seasonal	Time, Quality, etc.
Add					→
Change					→
Fix					→
Clean Up					→

Initial System WIP Limit Calculator

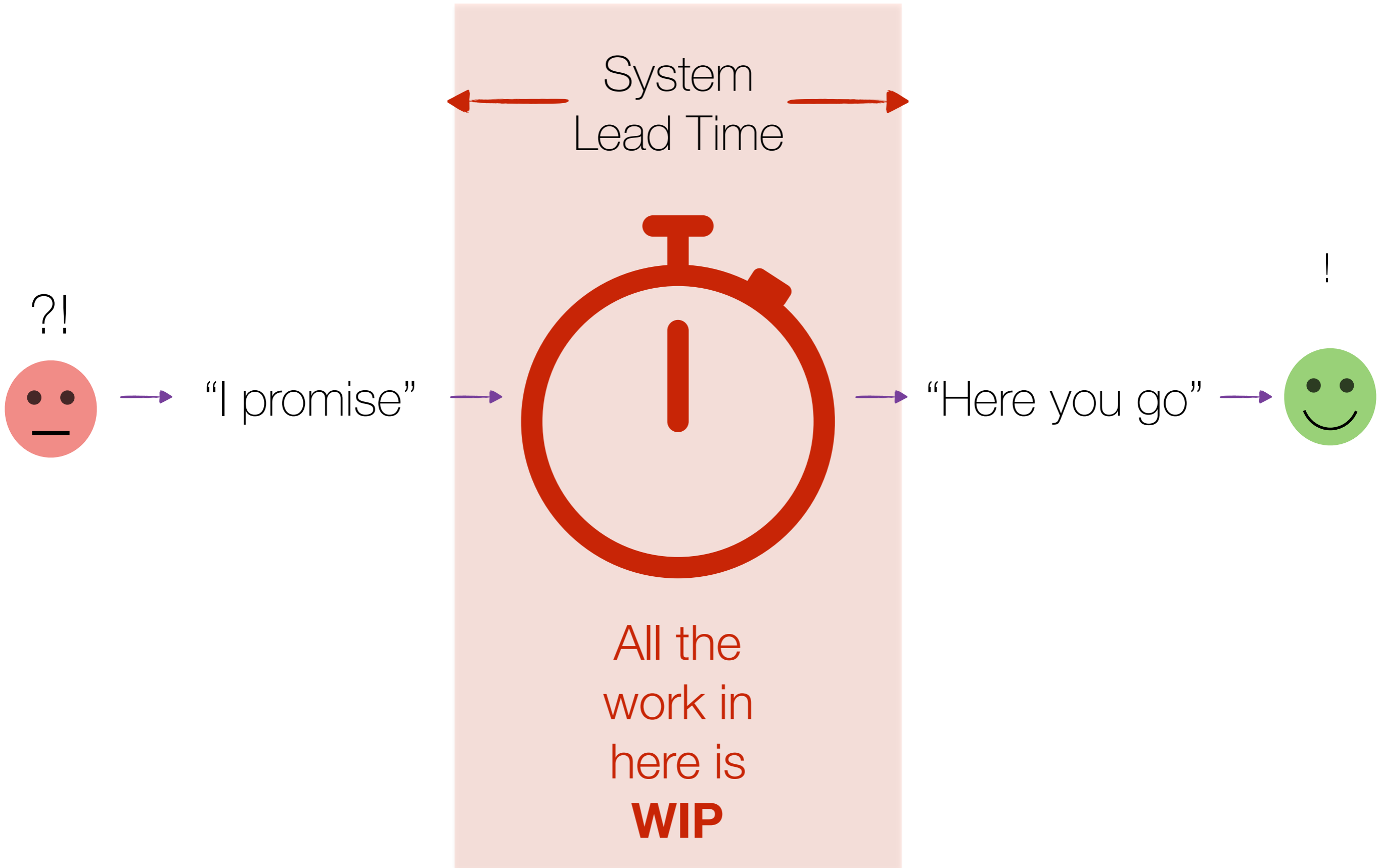
\sim Amount of work items in your system now.

∞

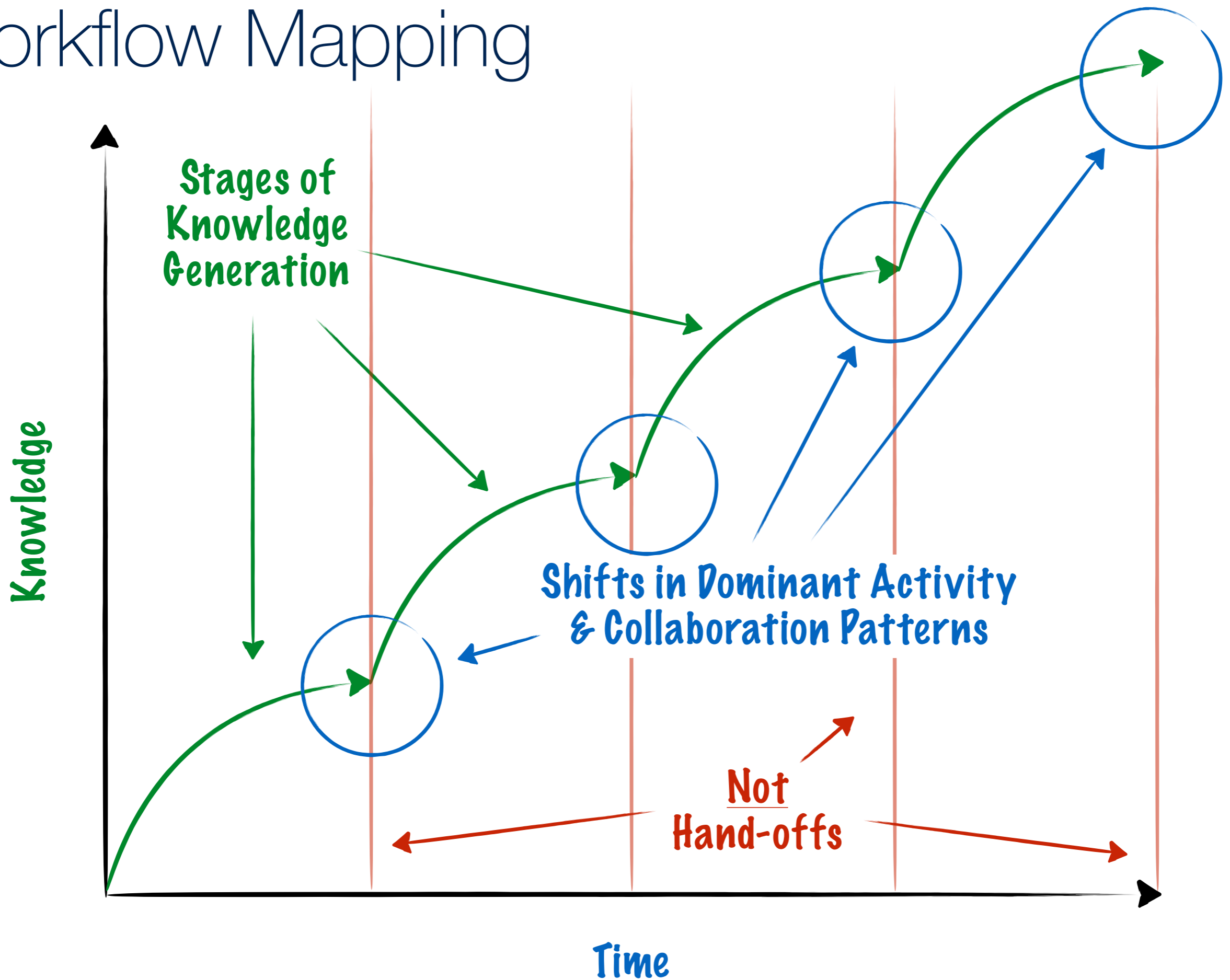
\wedge A number that everyone is comfortable with.

Use Little's Law to evolve towards survivability.

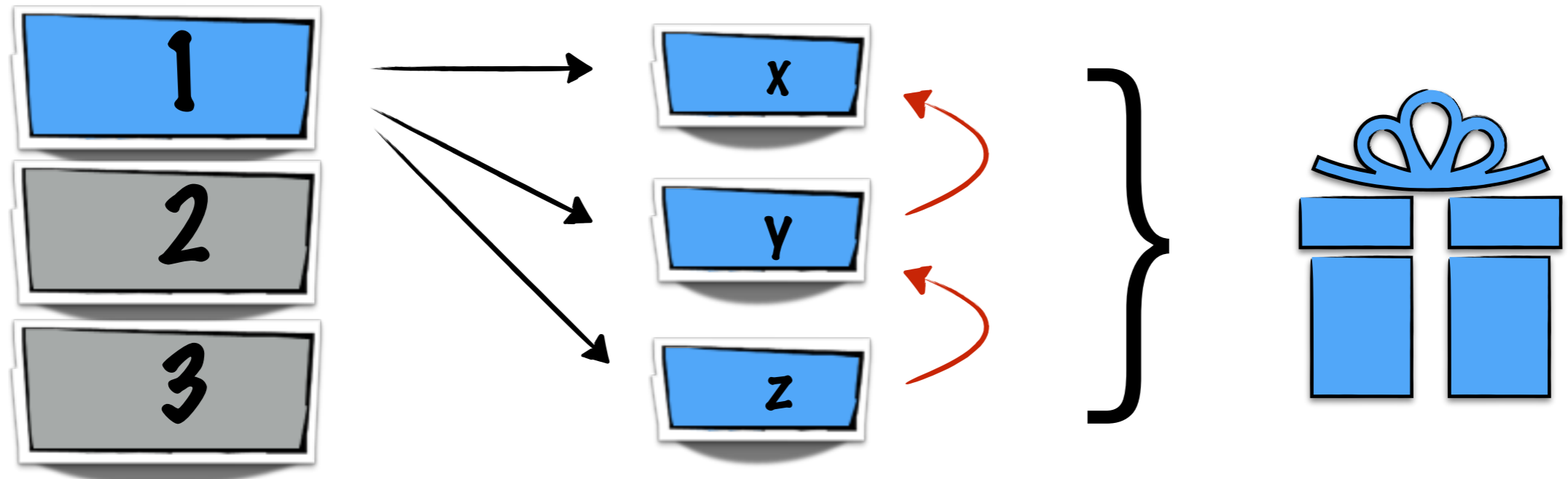
System WIP & Lead Time



Workflow Mapping



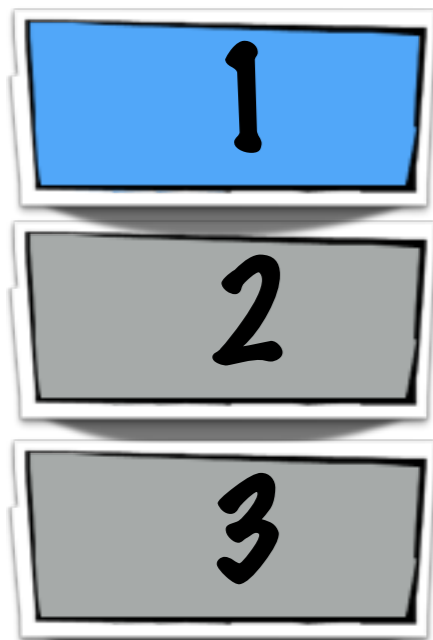
Customer-Recognizable Value



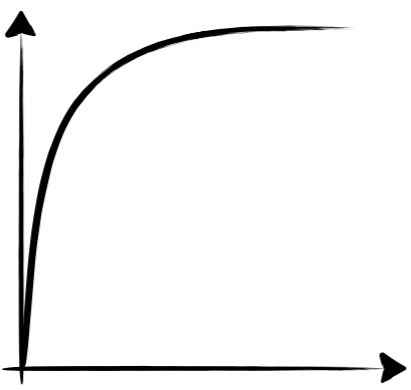
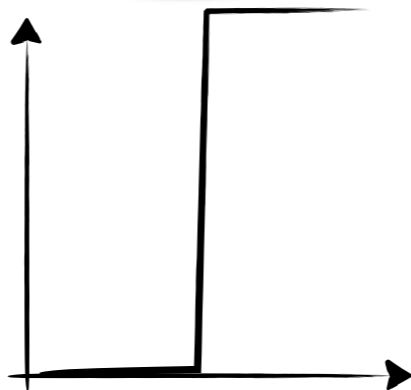
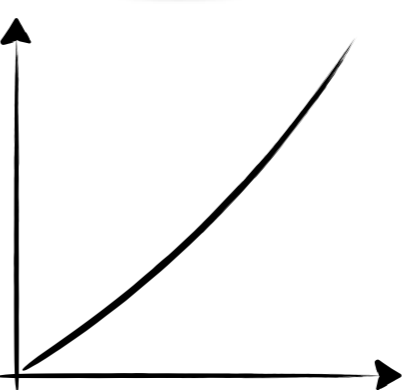
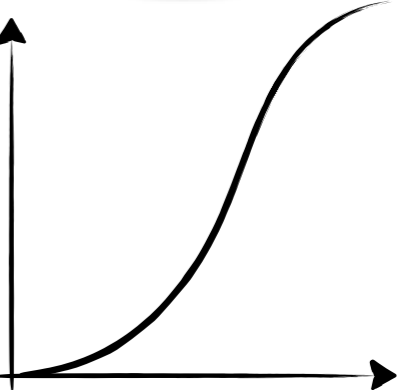
Z

Y

X



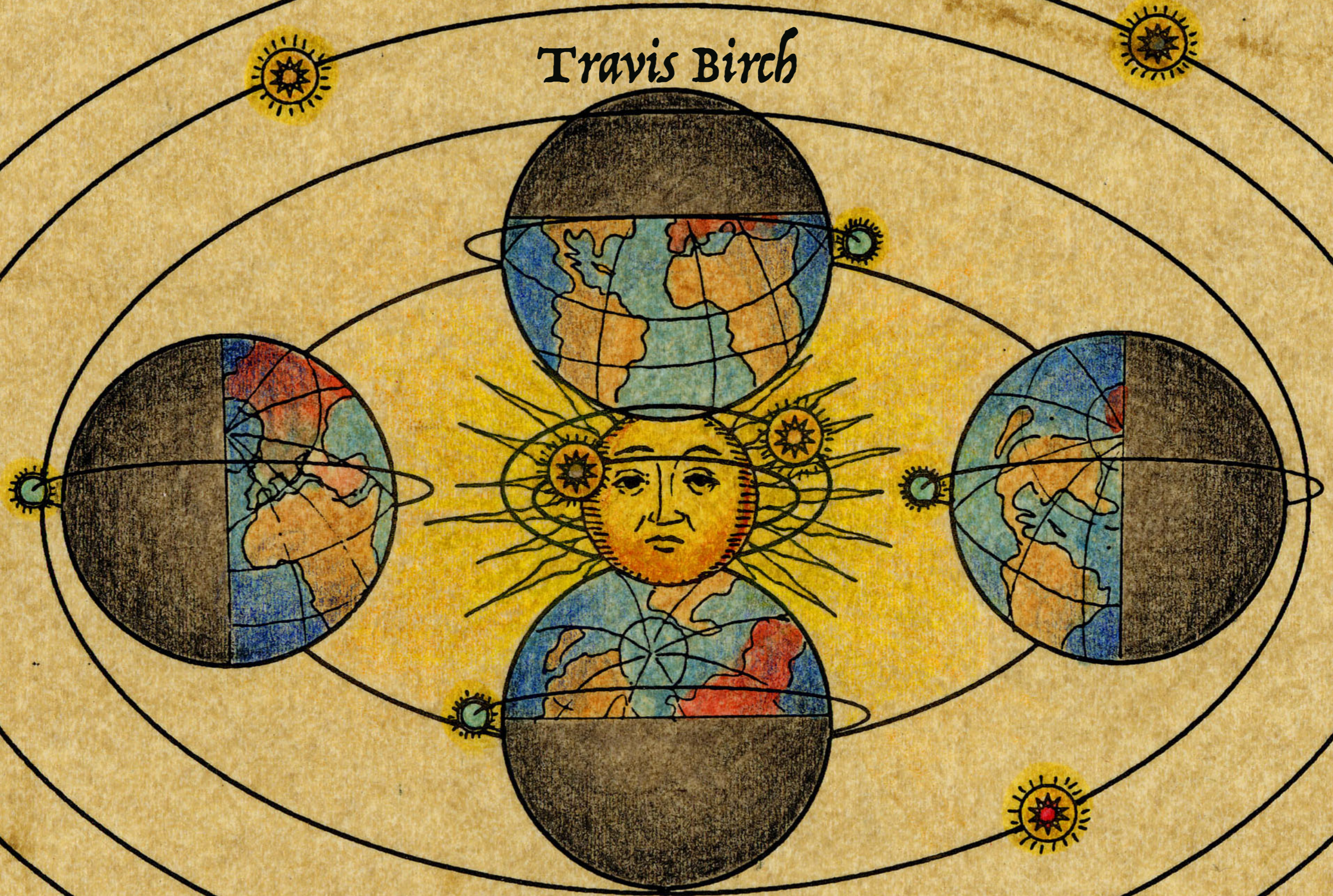
Type/Class Matrix

<div style="text-align: center;">Class</div> <div style="text-align: center;">Type</div>	<div style="text-align: center;">Expedite</div>  <div style="text-align: center;">Drop everything else, do it now.</div>	<div style="text-align: center;">Fixed Date</div>  <div style="text-align: center;">Absolute drop dead date.</div>	<div style="text-align: center;">Standard</div>  <div style="text-align: center;">ASAP</div>	<div style="text-align: center;">Intangible</div>  <div style="text-align: center;">We will need it eventually.</div>
Add	Yes/No? Criteria	Yes/No? Criteria	Yes/No? Criteria	Yes/No? Criteria
Change	Yes/No? Criteria	Yes/No? Criteria	Yes/No? Criteria	Yes/No? Criteria
Fix	Yes/No? Criteria	Yes/No? Criteria	Yes/No? Criteria	Yes/No? Criteria

If you can do a half-assed job of anything, you're a one-eyed man in a kingdom of the blind.

-Kurt Vonnegut

Travis Birch



consultant | Trainer

@xroadstree

BERTEIG