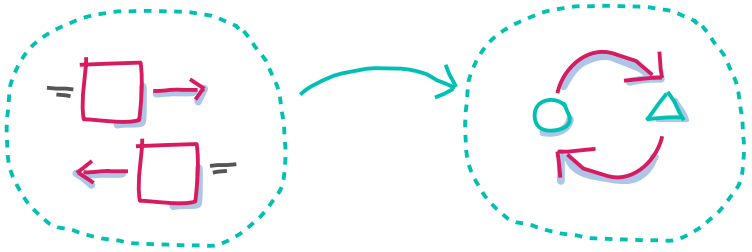


Optimising for a Fast Flow of Value w/ Architecture for Flow

Susanne Kaiser
Independent Tech Consultant
@suksr

Challenges of Building Systems

Building the right thing

- How aligned is our solution to business / user needs?
- Have we understood the problem?
- Do we share the same common understanding?

Effectiveness

Building the thing right

- How efficient are our engineering practices?
- How fast can we deliver changes?
- How easy and fast can we change and adapt?

Efficiency

Challenges of Building Systems

Building the right thing

How aligned is our solution to business / user needs?

Have we understood the problem?

Do we share the same common understanding?

Effectiveness

"Doing the wrong thing right is not nearly as good as doing the right thing wrong"

Dr. Russell Ackoff

Building the thing right

How efficient are our engineering practices?

How fast can we deliver changes?

How easy and fast can we change and adapt?

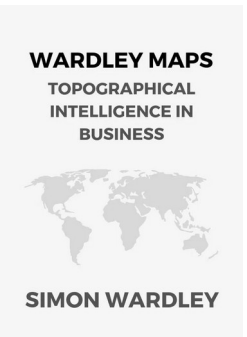
Efficiency

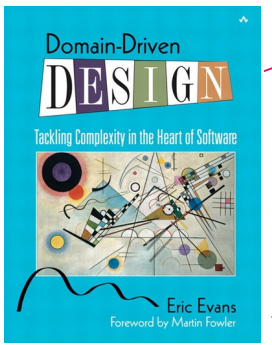
"Crap delivered quickly (and sustainably) is still crap, (unless we learn something, and act on that learning...)"

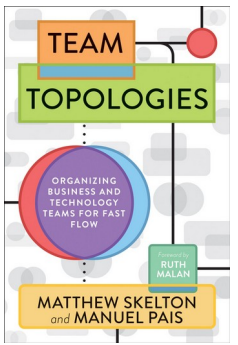
John Cutler

Building the right thing right

Building adaptive, socio-technical systems optimized for a fast flow of value & feedback







Architecture for Flow

Architecture for Flow Canvas

As-Is | To-Be

Analyzing Current Teams | Assessing Flow of Change | Visualising Current Landscape | Categorizing Problem Space | Modularizing Solution Space | Visualising Future Landscape | Deriving Future Team Organization

START

AS-IS

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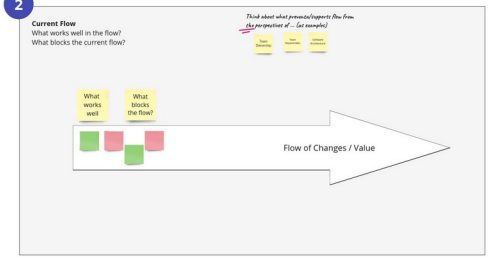
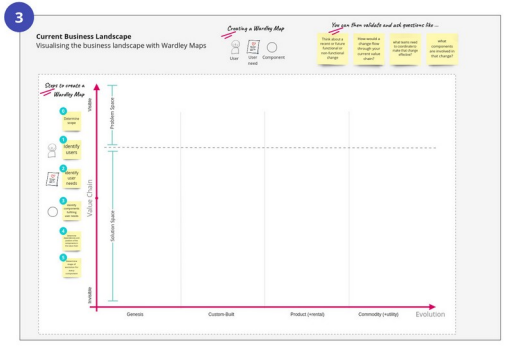


3

Current Business Landscape

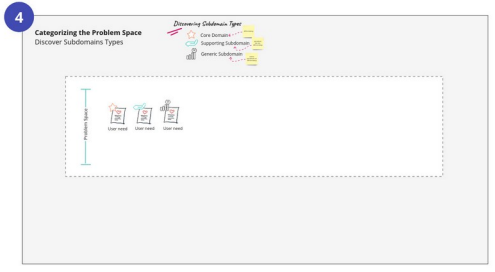
Visualising the business landscape with Wardley Maps



4

Categorizing the Problem Space

Discover Subdomains Types



INNOVATION!

TO-BE

5

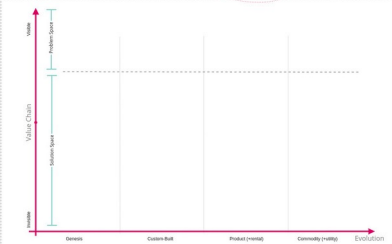
Modularity in the Solution Space

Decomposing solution space into bounded contexts (design decisions)

6

Future Business Landscape & Bounded Contexts

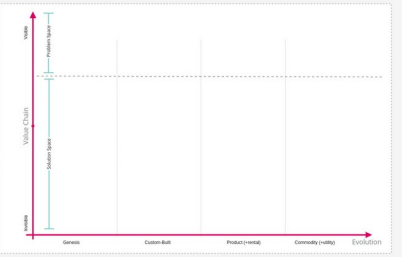
Visualising the future business landscape with Wardley Maps



7

Future Team Ownership Boundaries

Identifying future team ownership boundaries



8

Future Team Constellation & Interaction Modes

Current Teams & Ways of Working

As-Is | To-Be

Analyzing Current Teams | Assessing Flow of Change | Visualising Current Landscape | Categorizing Problem Space | Modularizing Solution Space | Visualising Future Landscape | Deriving Future Team Organization

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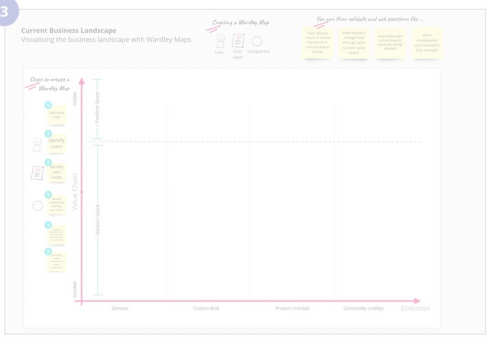
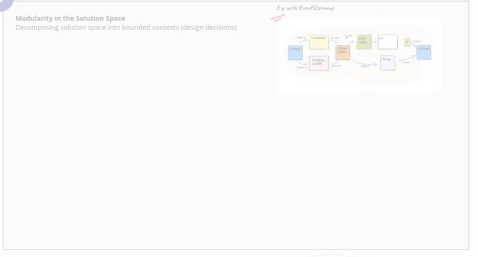


IMPROVE

TO-BE

5



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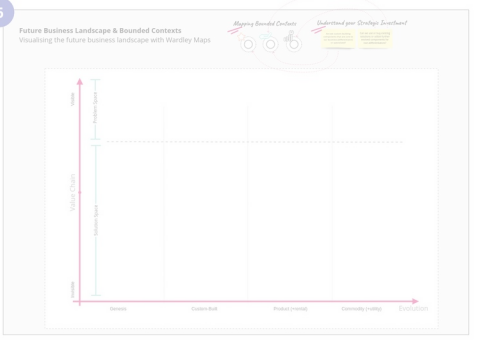

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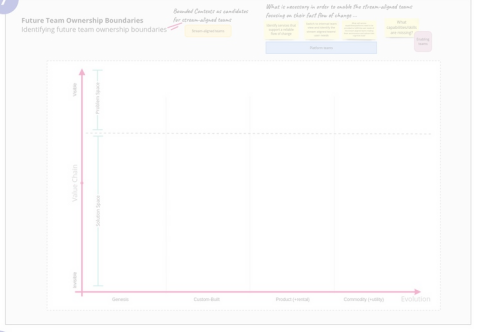

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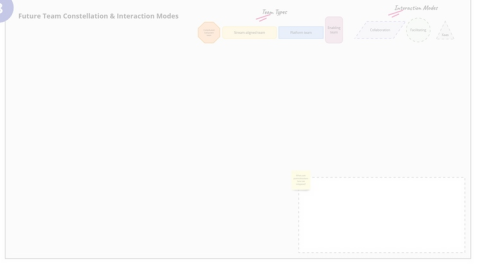
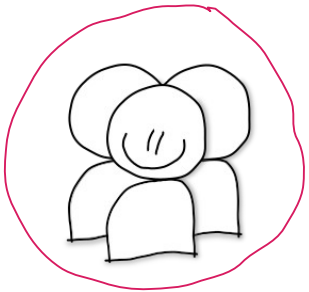


Current Teams & Ways of Working

How are teams currently organized (structure)?

Frontend Team



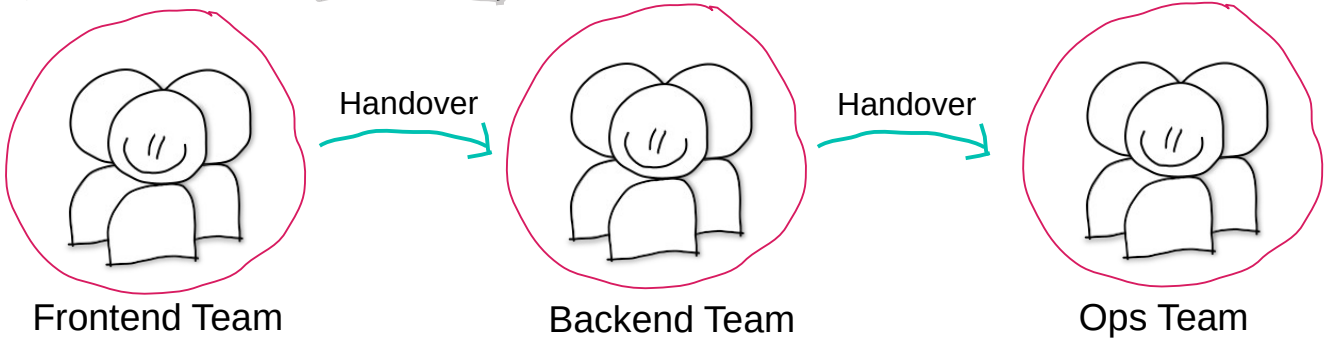
Backend Team

Ops Team

Current Teams & Ways of Working

How are teams currently organized (structure)?

What are the team dependencies and their way of interaction?



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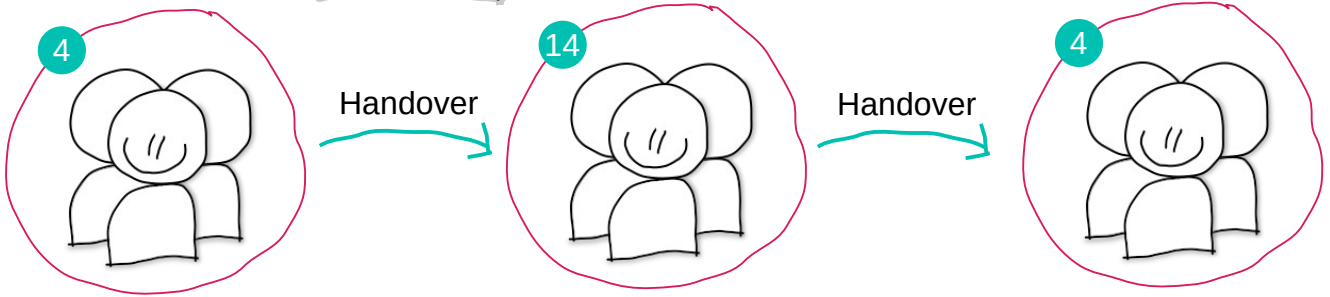

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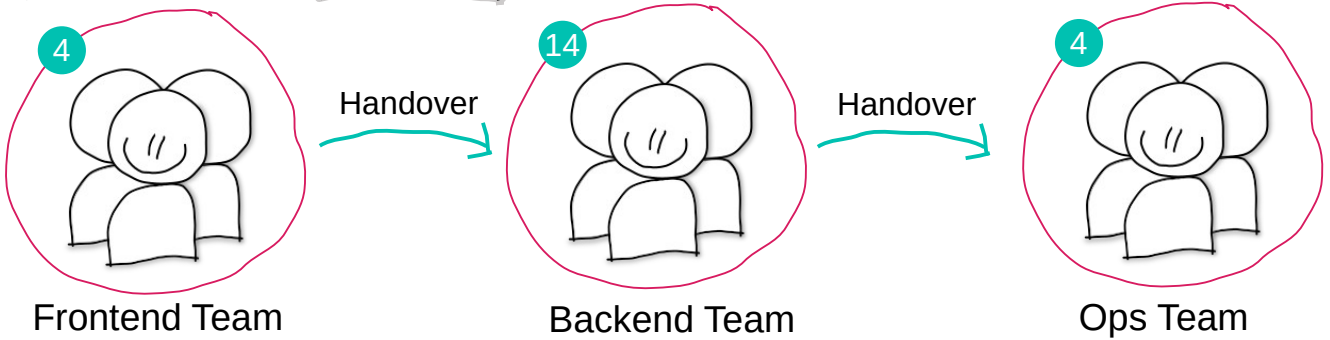
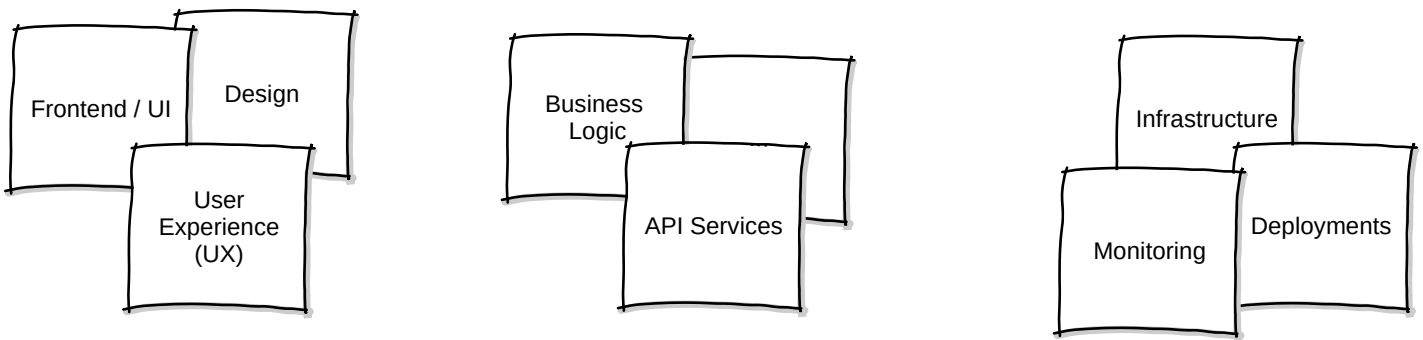


What parts of the system do they own?



Assessing Current Flow of Change

As-Is | To-Be

Analyzing Current Teams | **Assessing Flow of Change** | Visualising Current Landscape | Categorizing Problem Space | Modularizing Solution Space | Visualising Future Landscape | Deriving Future Team Organization

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2

Current Flow

What works well in the flow?
What blocks the current flow?

Think about what promote/supports flow from (the perspective of ... (at examples)

What works well

What blocks the flow?

Flow of Changes / Value

3

Current Business Landscape

Visualising the business landscape with Wardley Maps

Creating a Wardley Map

Steps to create a Wardley Map

Value Chain

Problem Space

Solution Space

Visible

Invisible

Genesis

Custom-Built

Product (+rental)

Commodity (+utility)

Evolution

4

Categorizing the Problem Space

Discover Subdomains Types

Discovering Subdomain Types

Problem Space

5

Modularity in the Solution Space

Decomposing solution space into bounded contexts (design decisions)

6

Future Business Landscape & Bounded Contexts

Visualising the future business landscape with Wardley Maps

Mapping Bounded Contexts

Understand your Strategic Investment

7

Future Team Ownership Boundaries

Identifying future team ownership boundaries

Bounded Context as candidates for stream-aligned team

8

Future Team Constellation & Interaction Modes

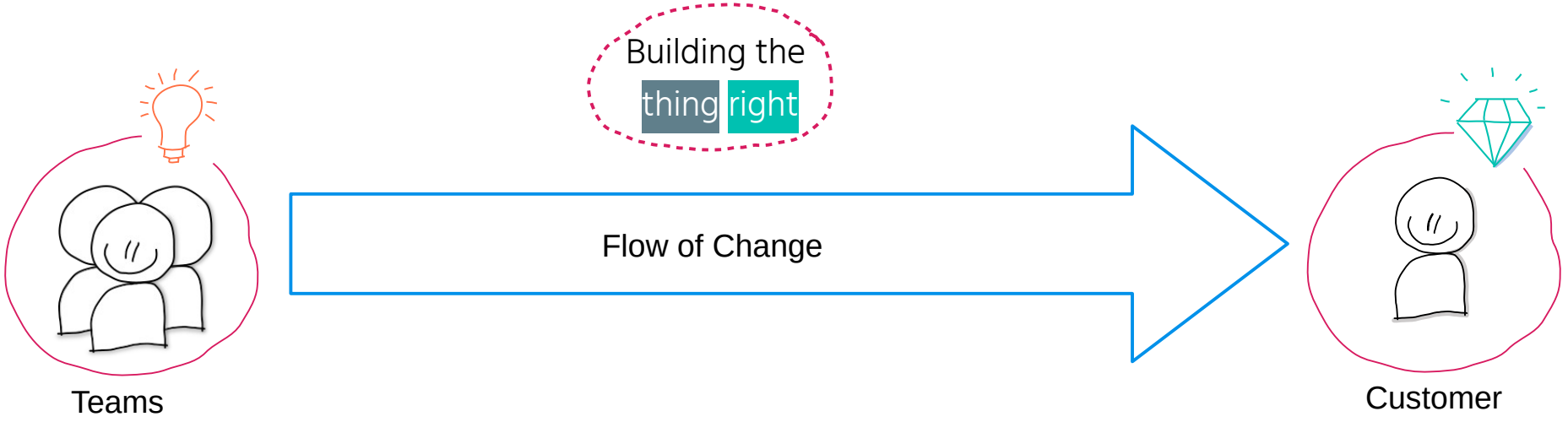
Team Types

Interaction Modes

IMPROVE

TO-BE

Assessing Current Flow of Change



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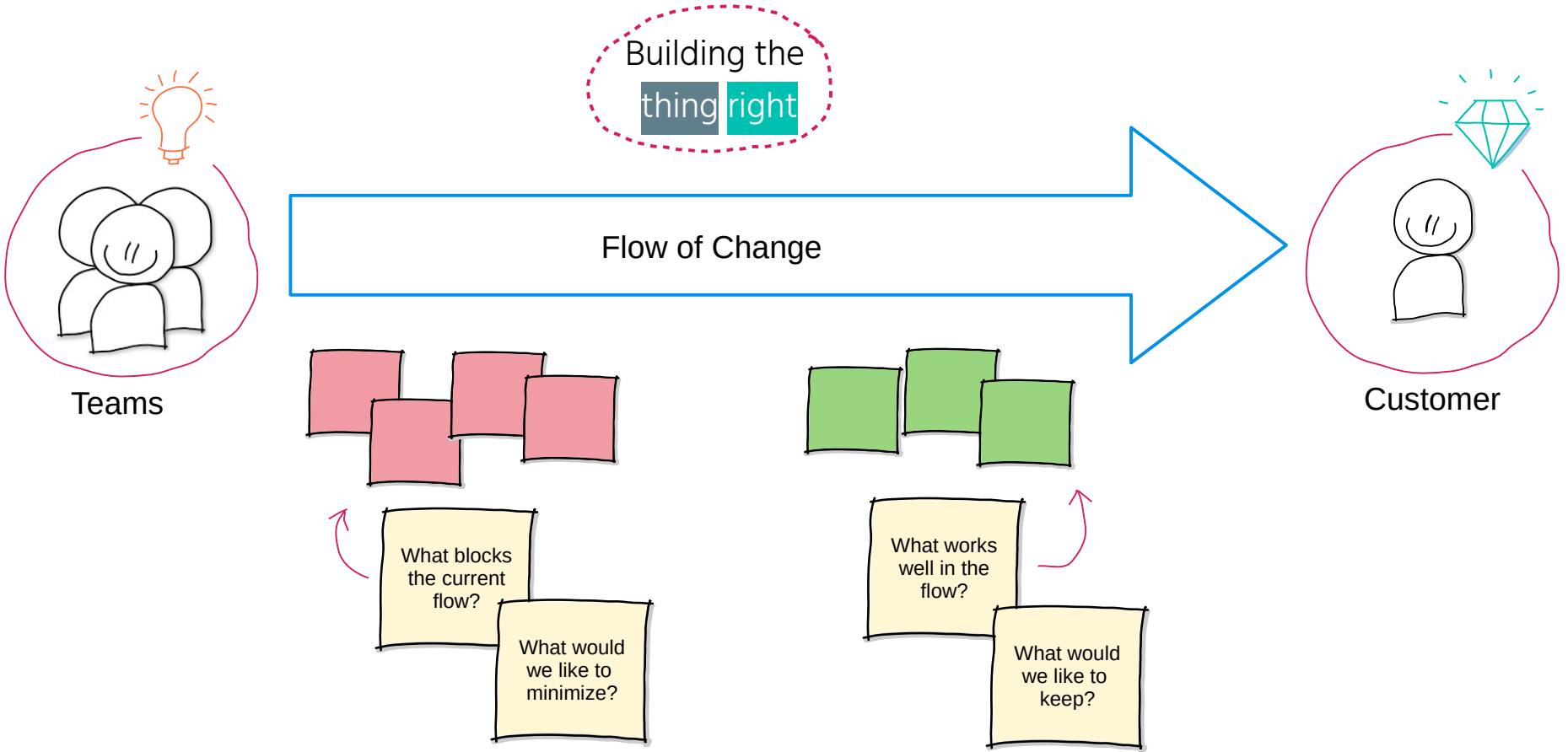
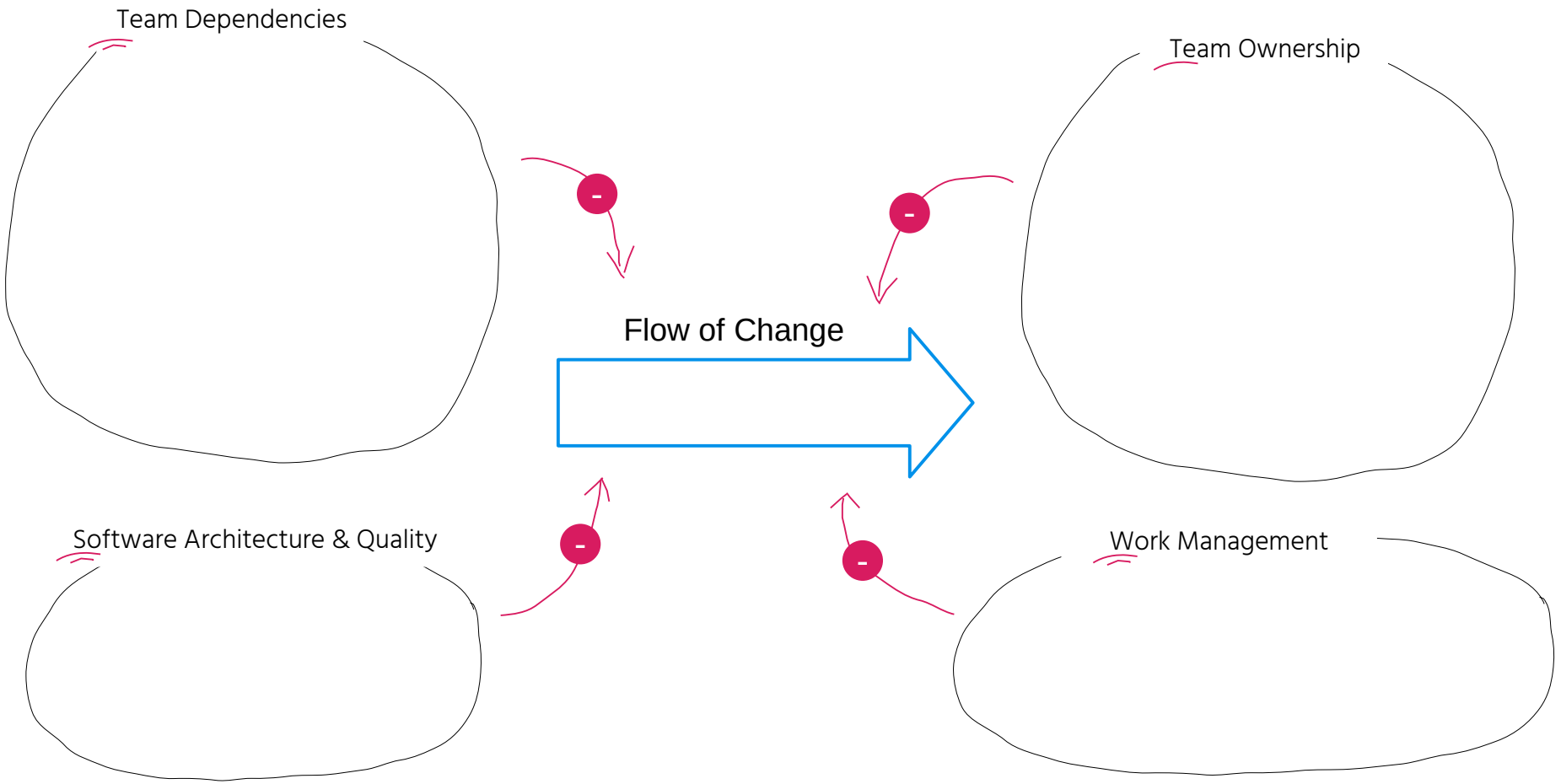


What is Preventing Flow? (Examples)



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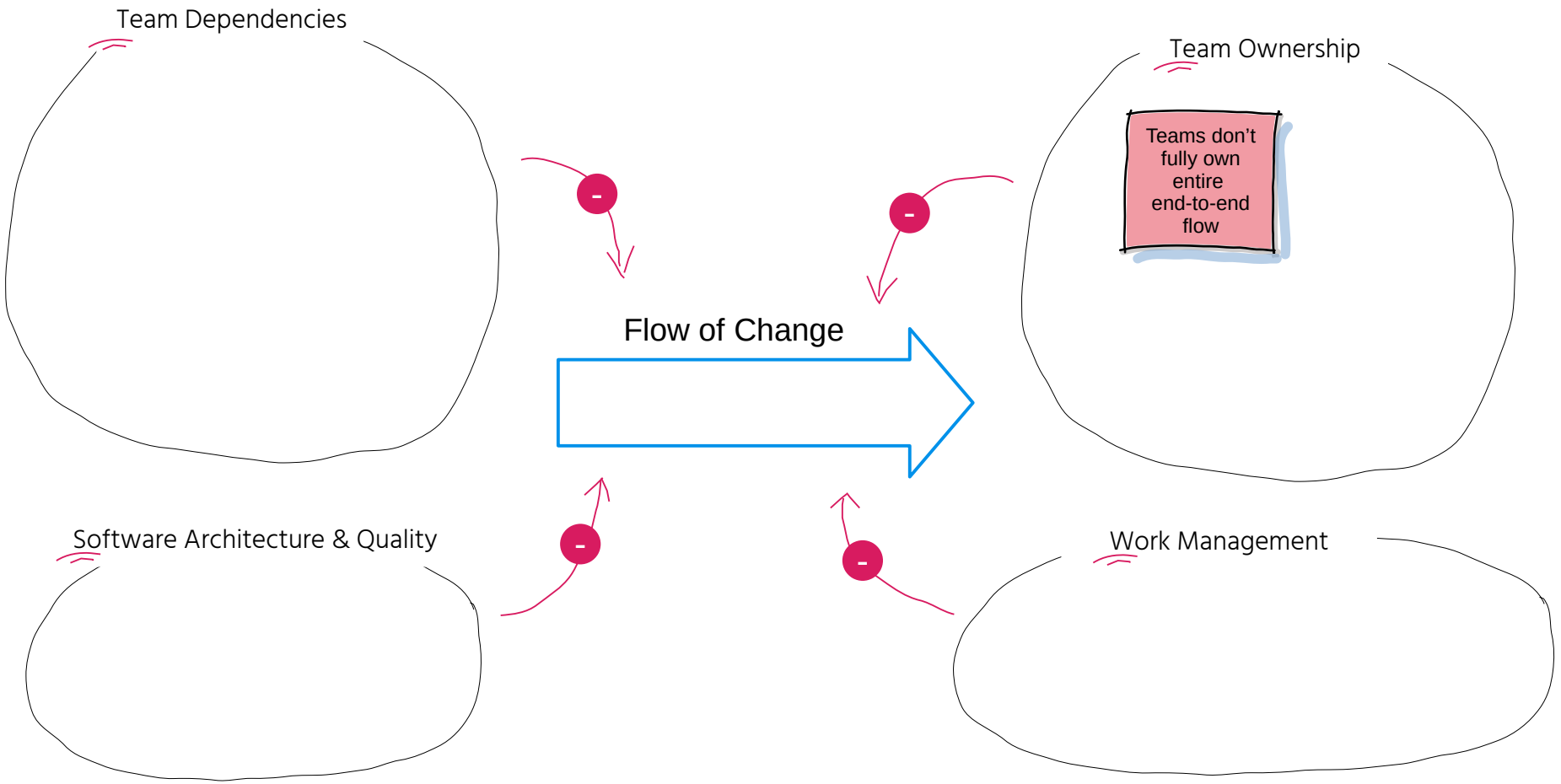

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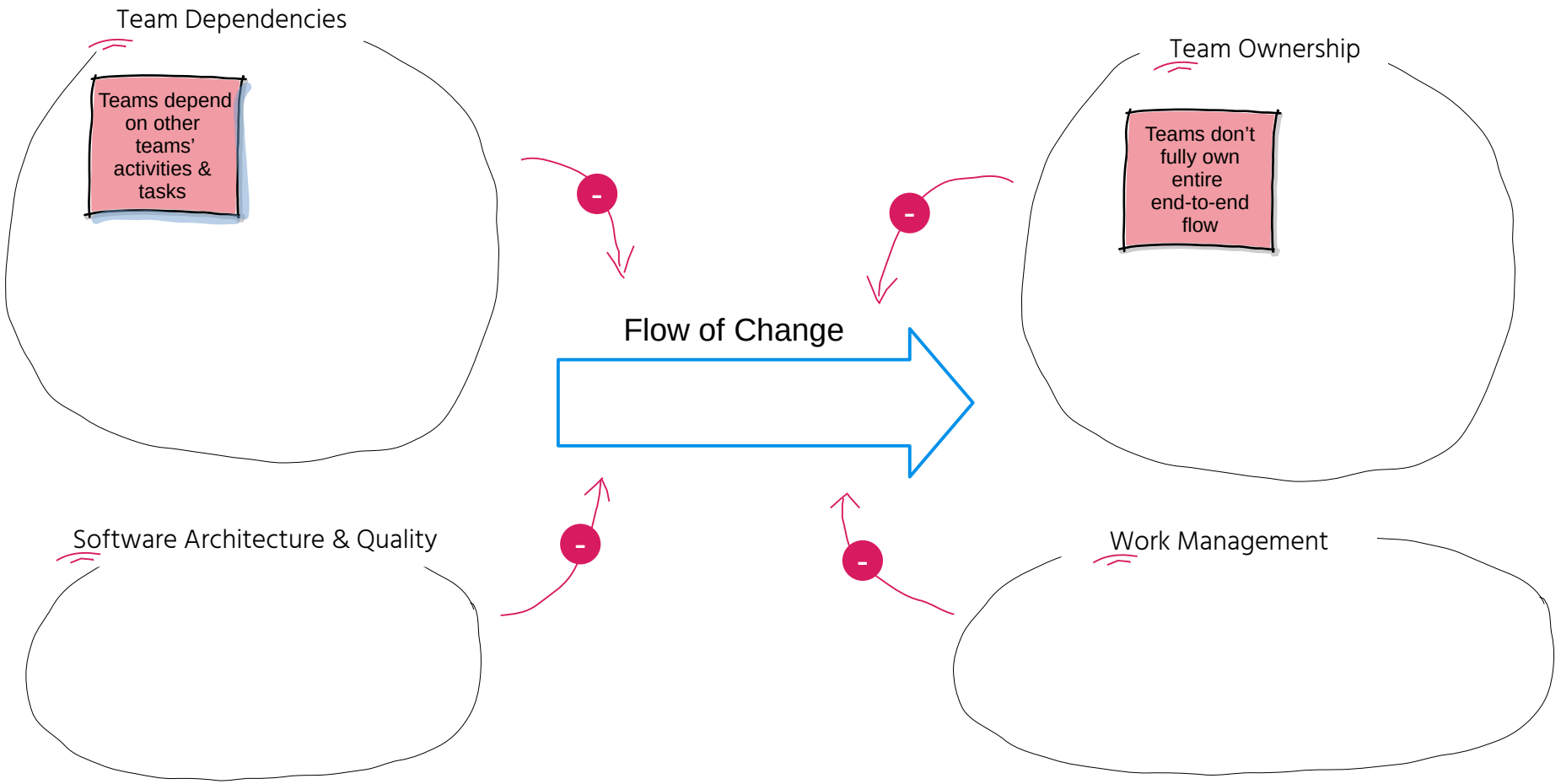

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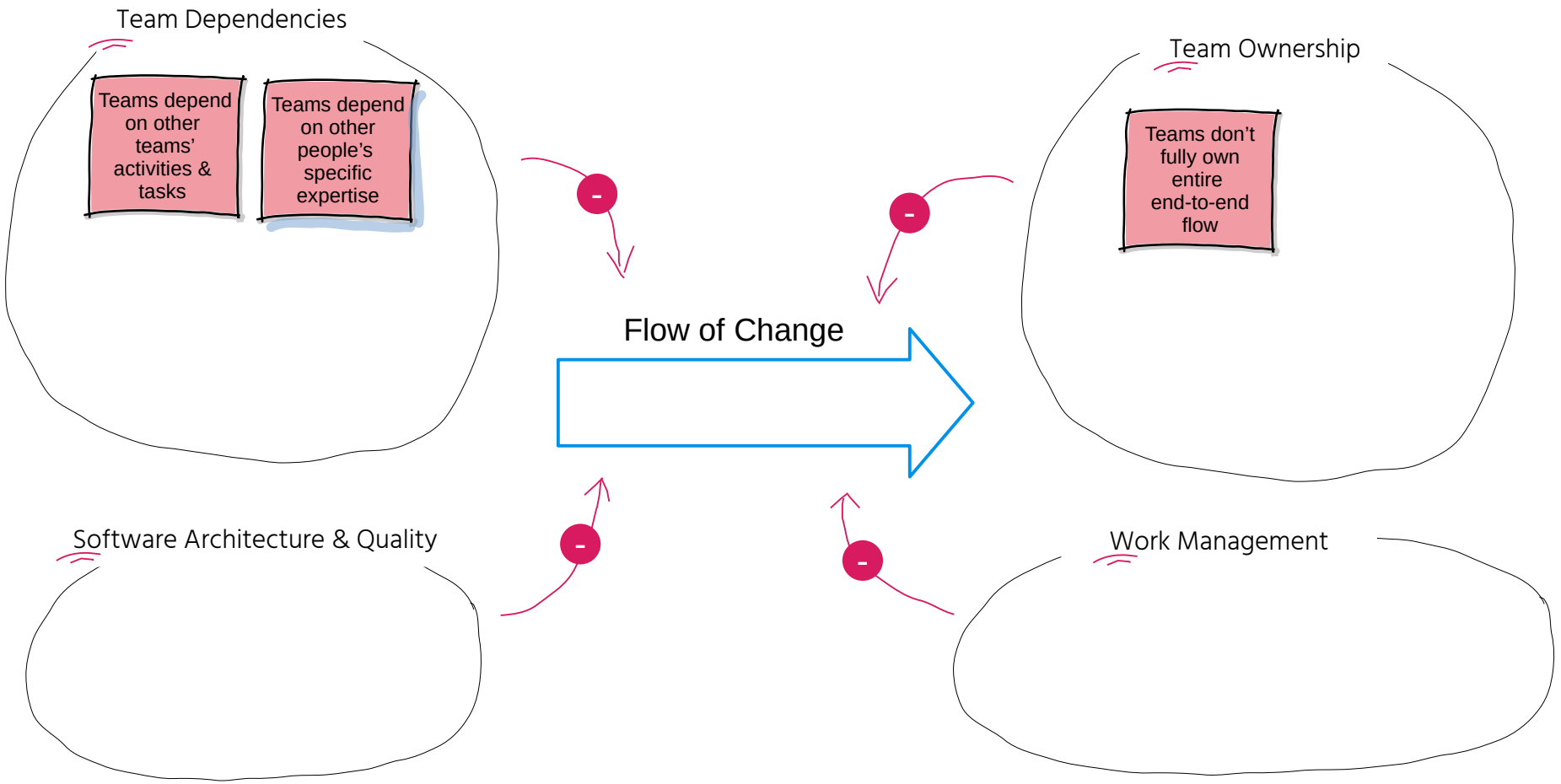

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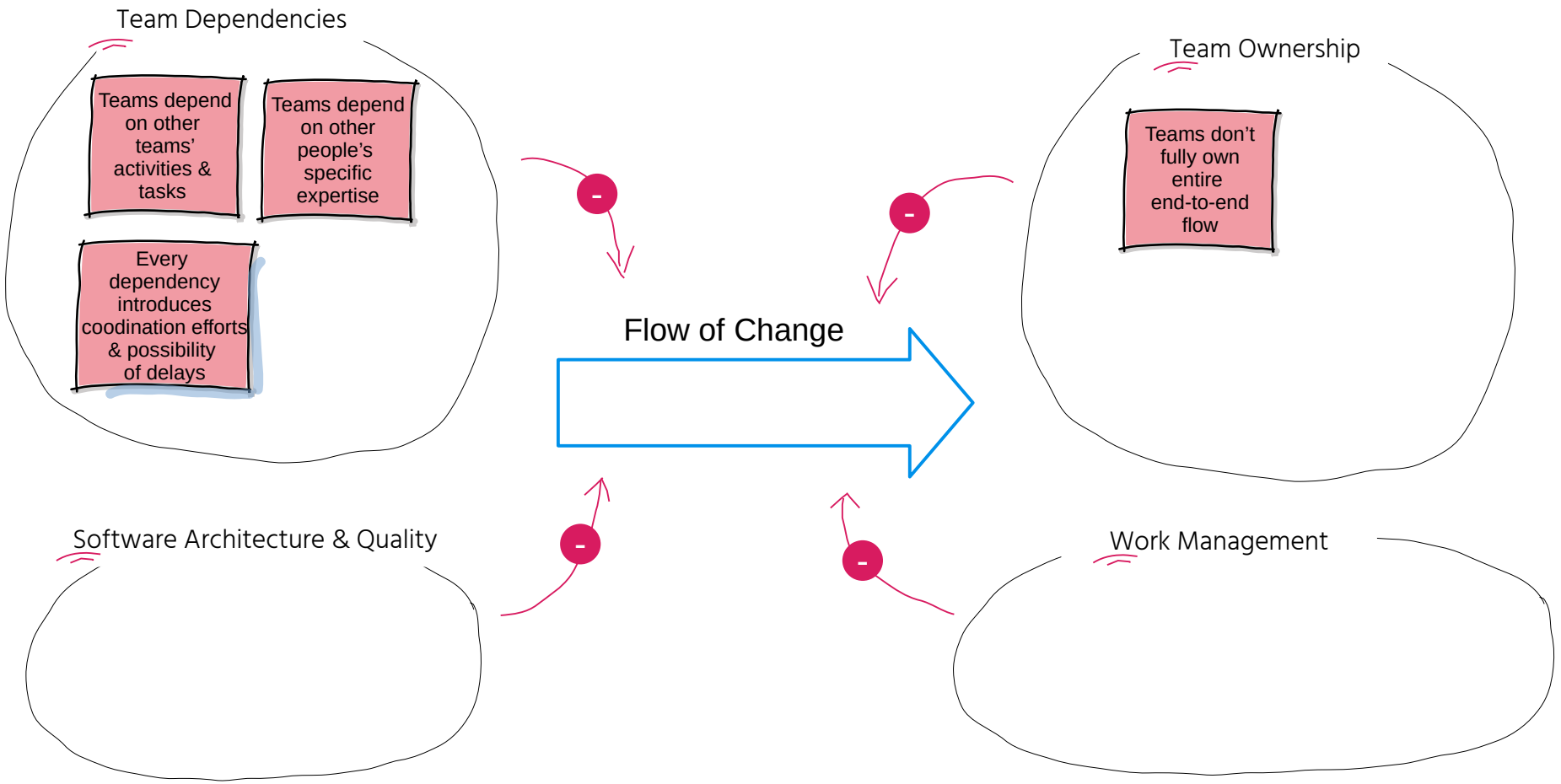

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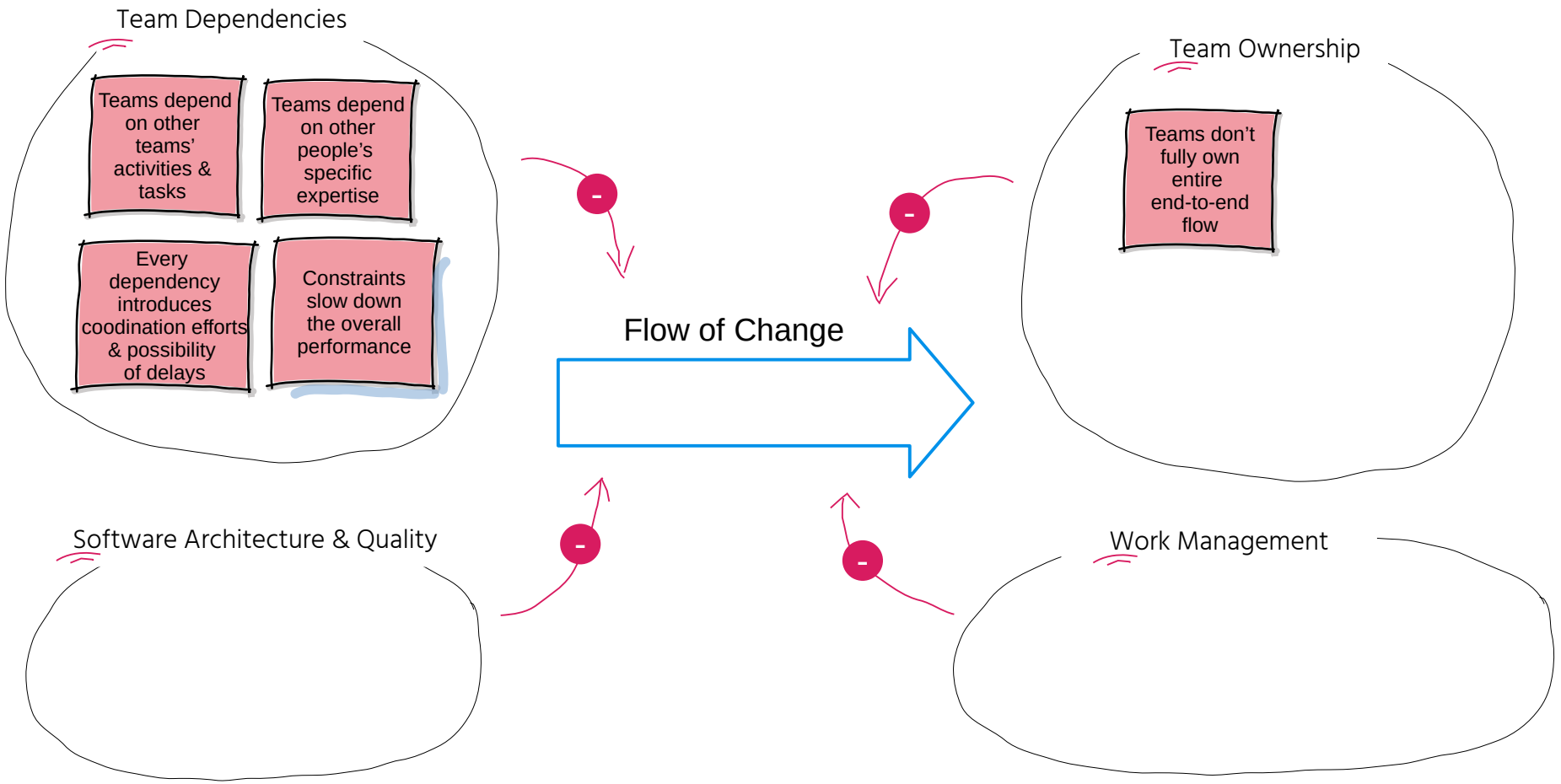

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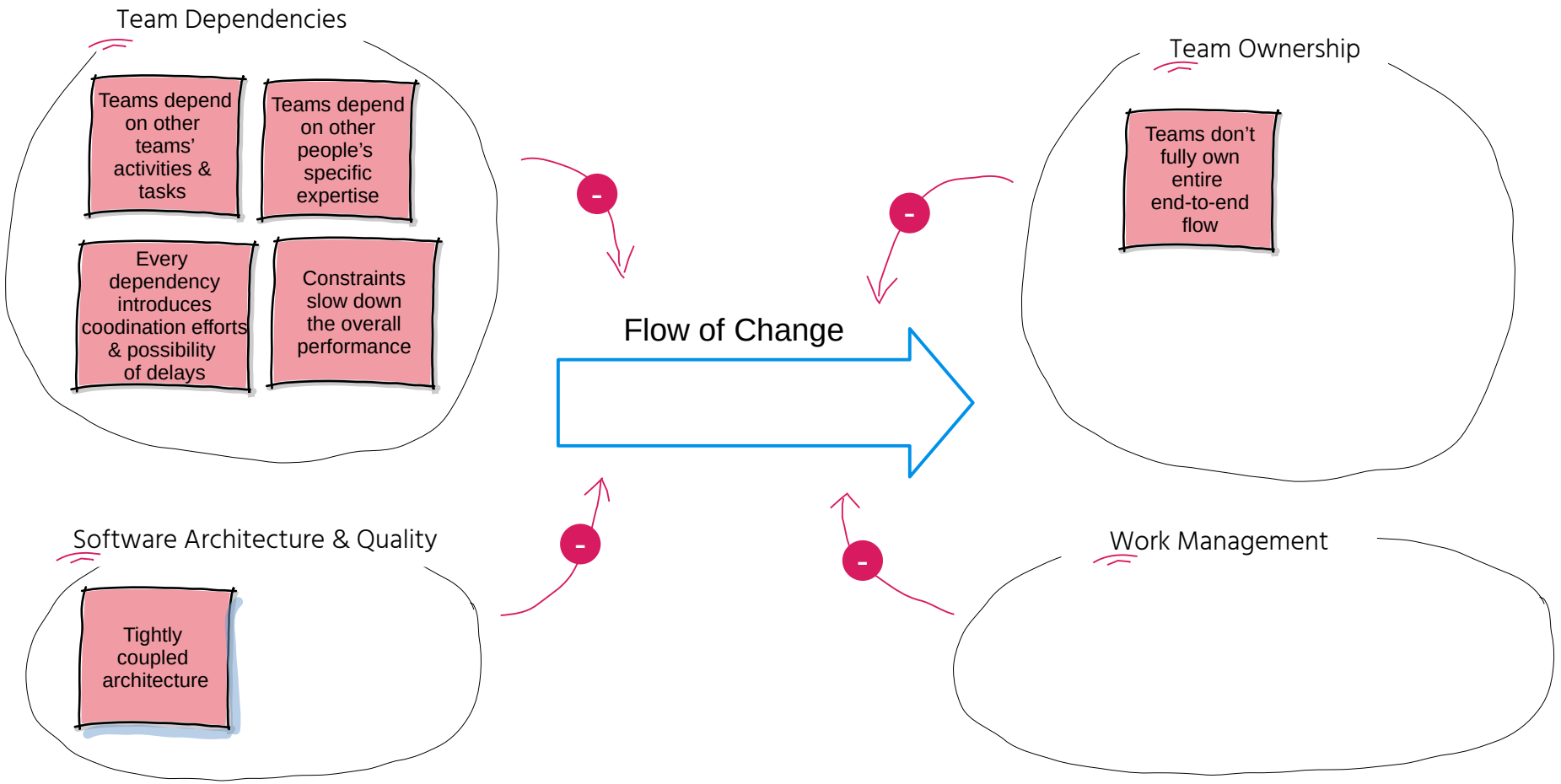

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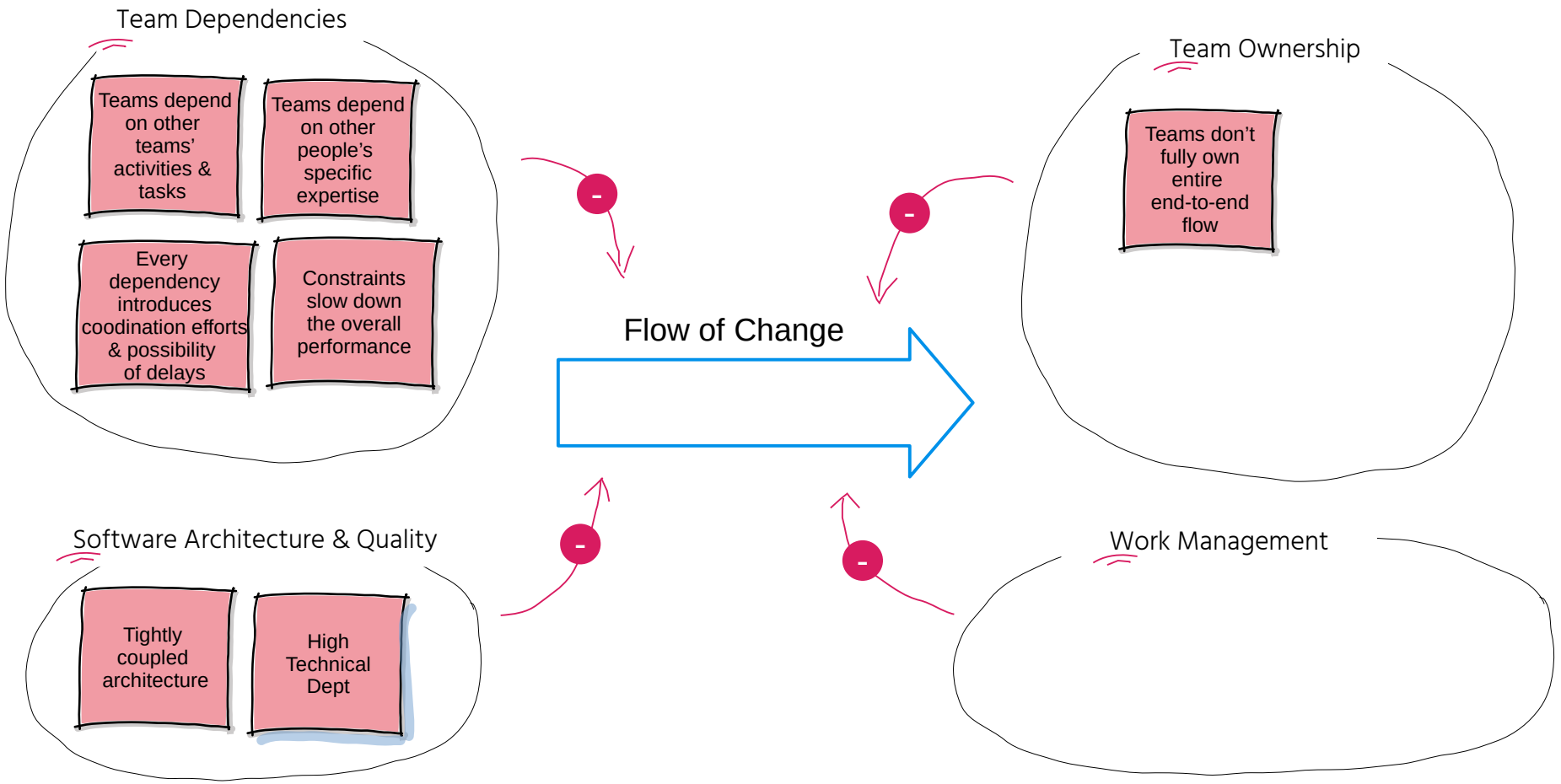

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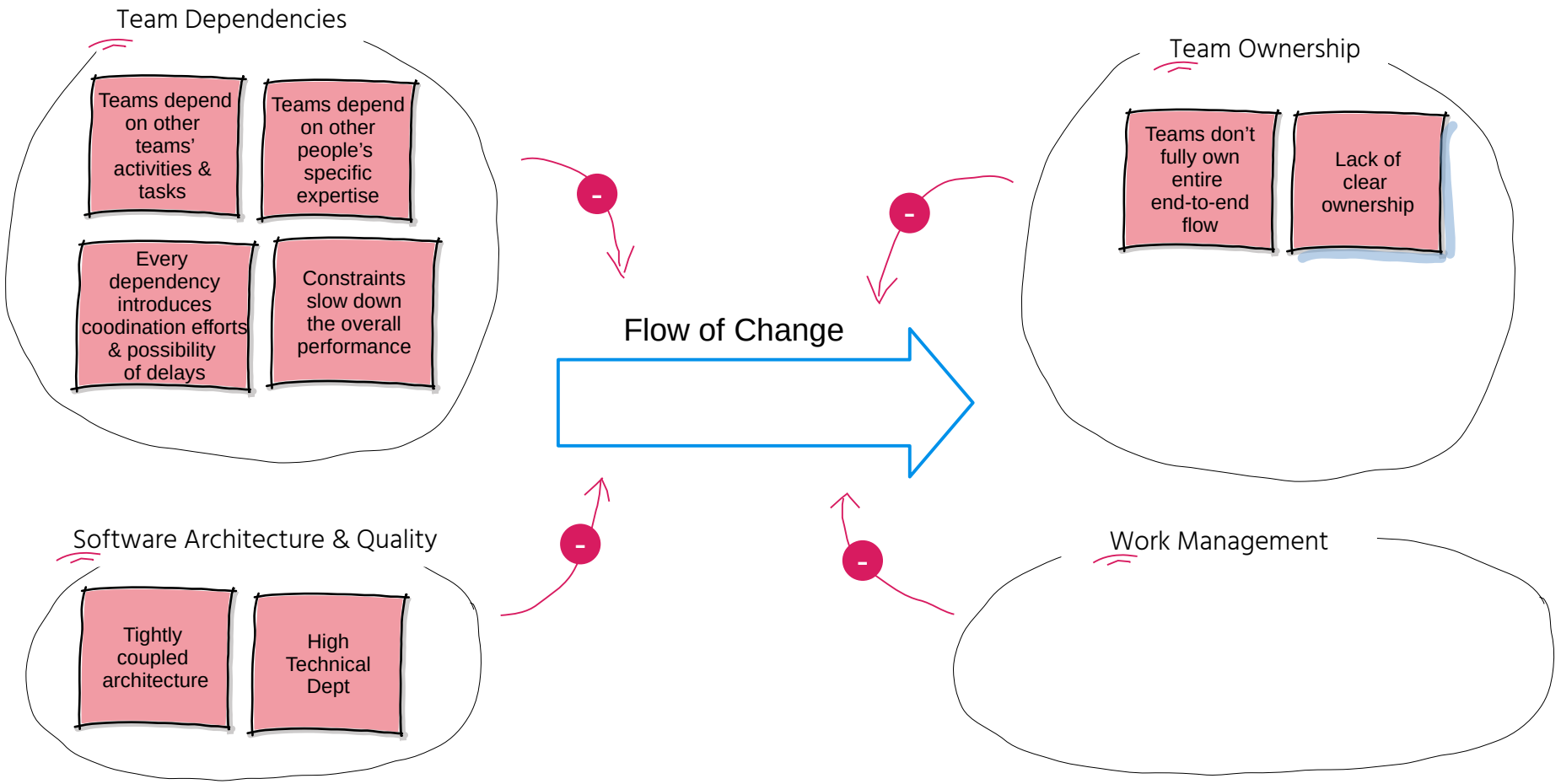

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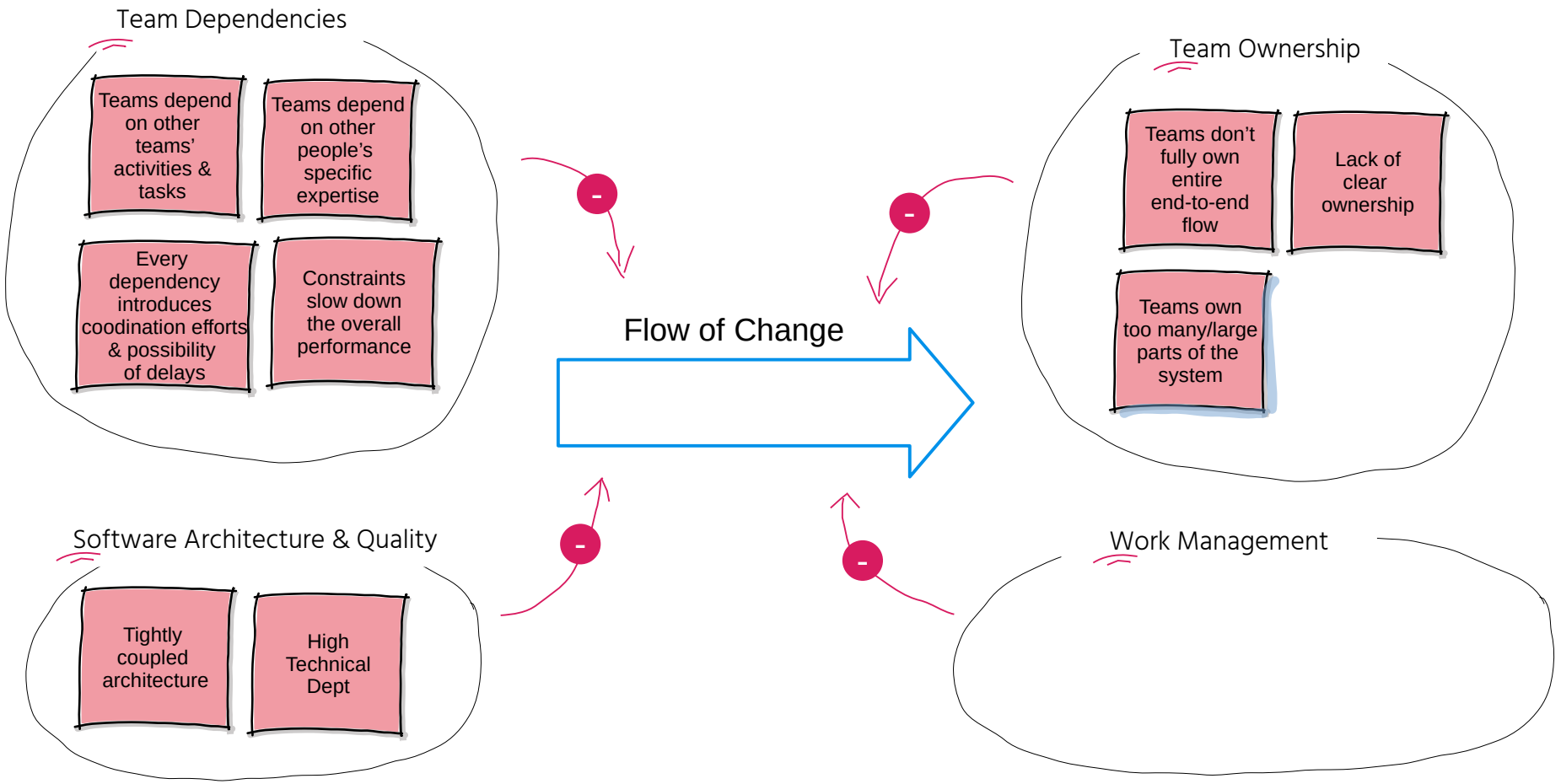

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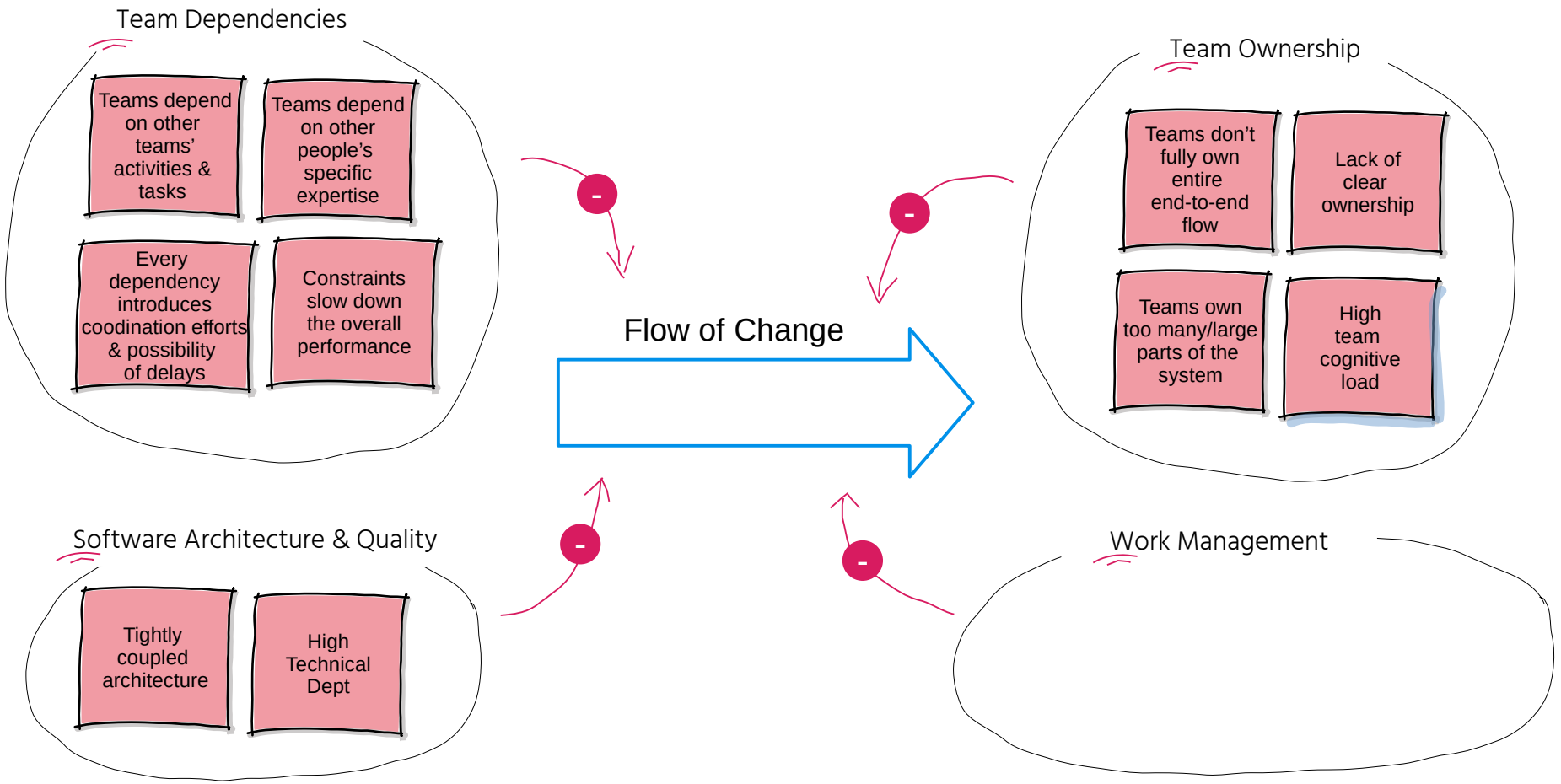

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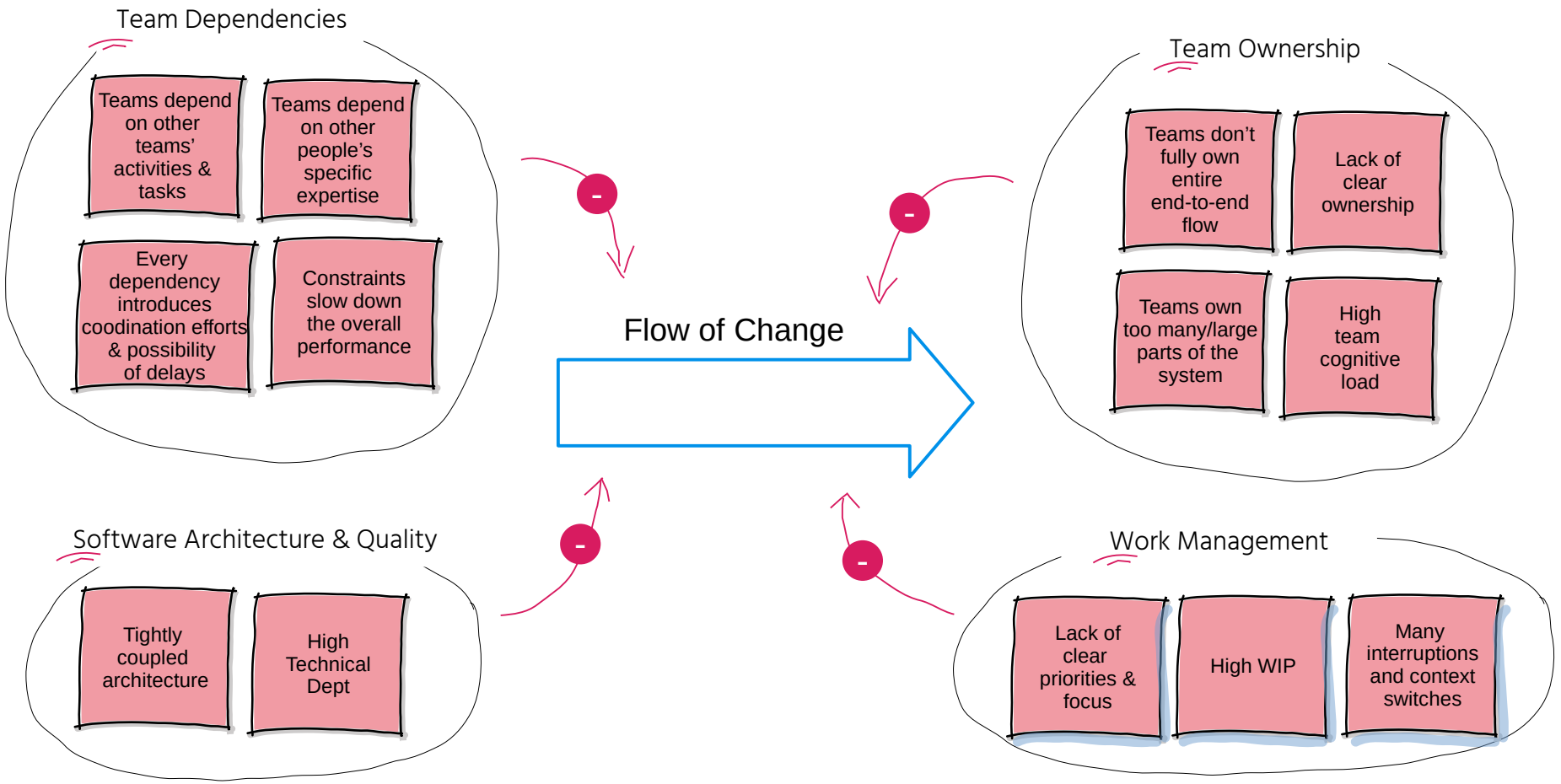

Visualizing the Current Landscape

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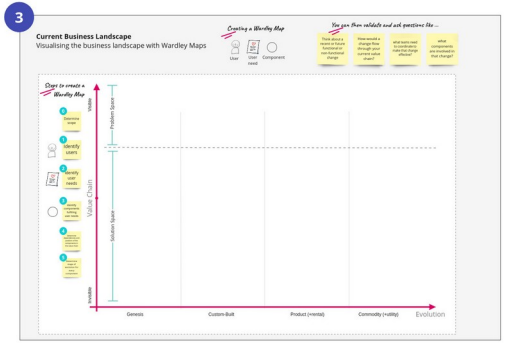
Visualising the business landscape with Wardley Maps



IMPROVE

TO-BE

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Identifying future team ownership boundaries

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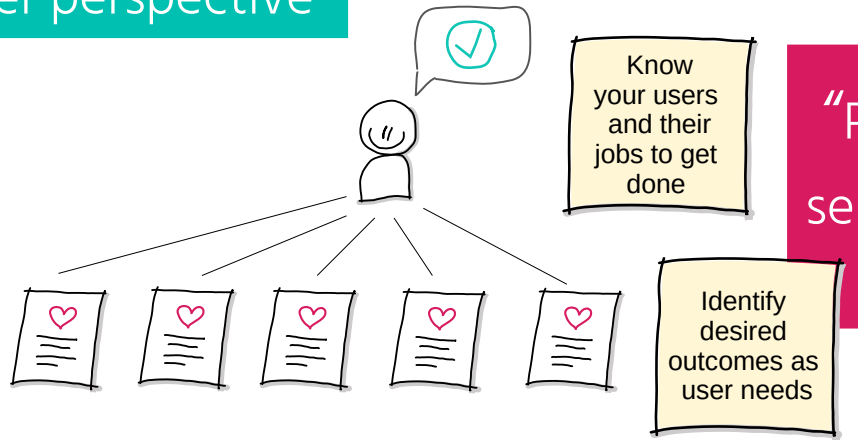
Future Team Constellation & Interaction Modes

Starting from the user perspective

Building the right thing

Problem Space



"People buy products and services to get a job done."

Clayton Christensen

Starting from the user perspective

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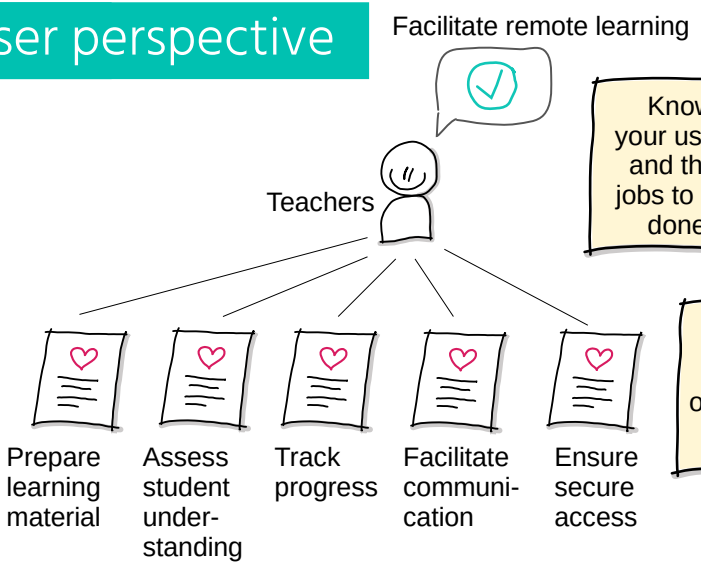
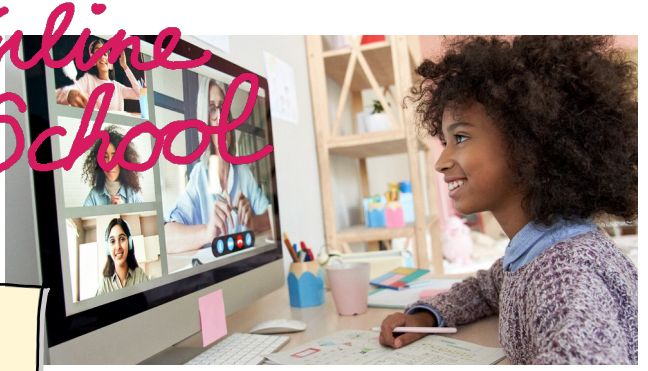
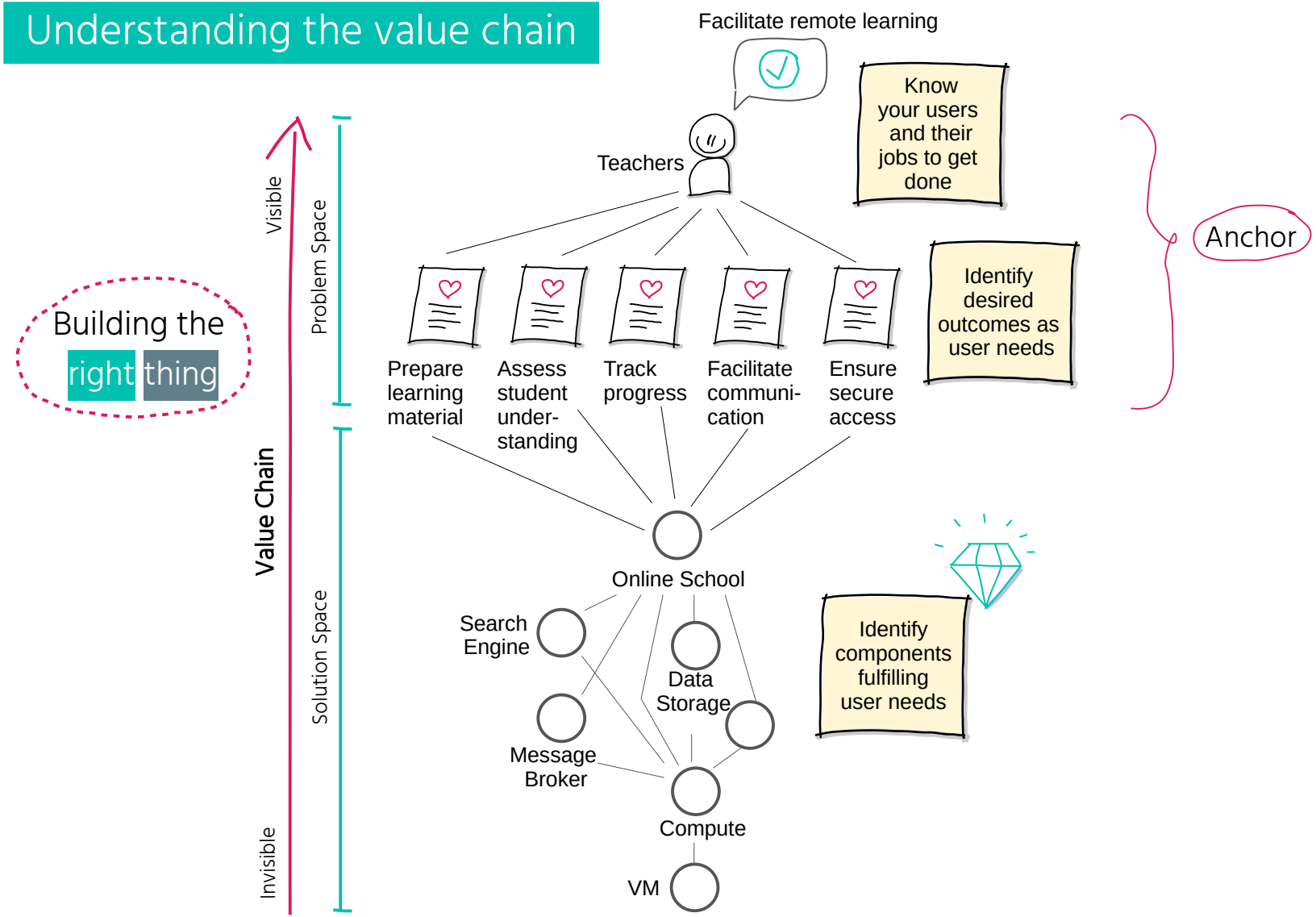


Know your users and their jobs to get done

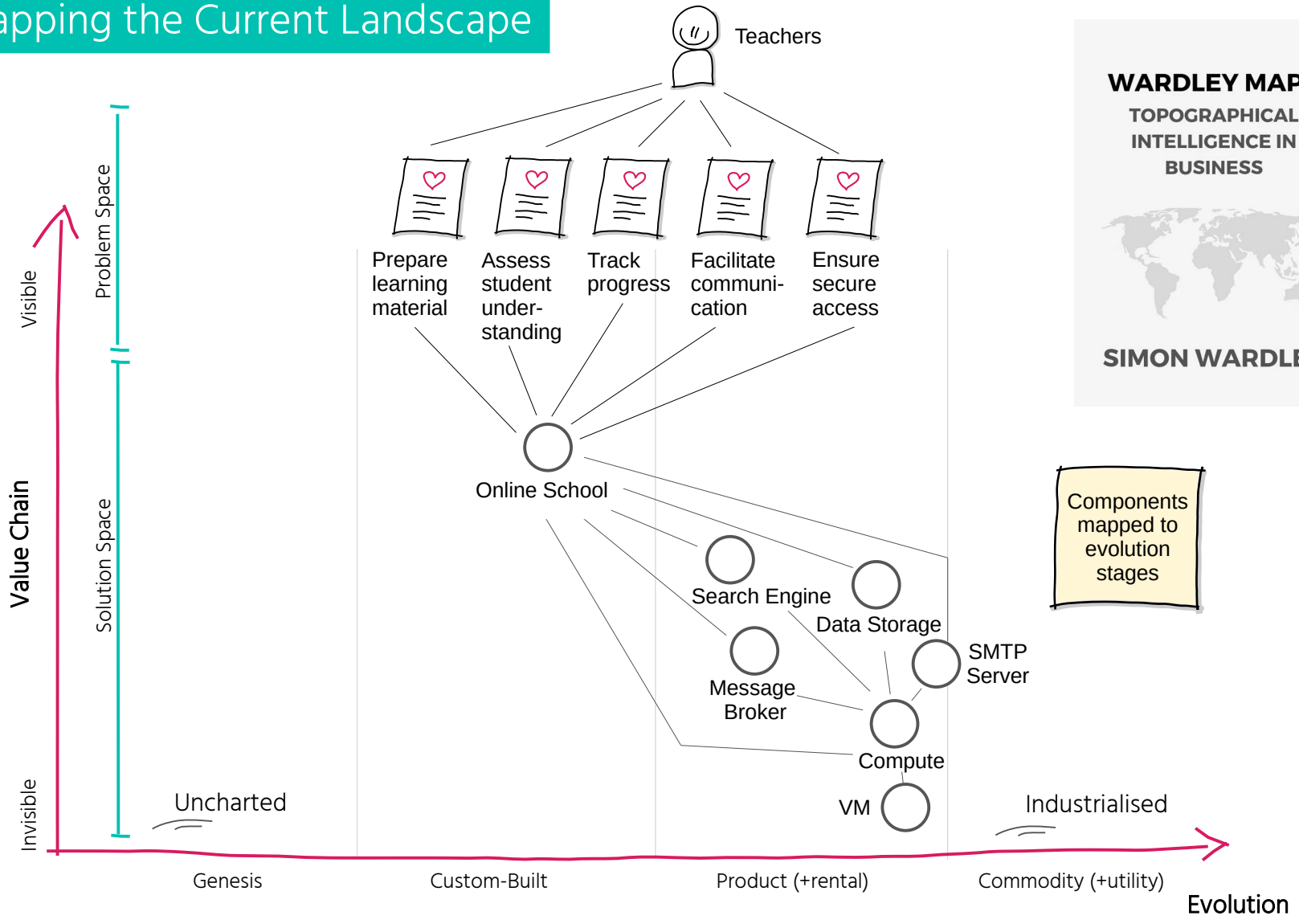
Identify desired outcomes as user needs

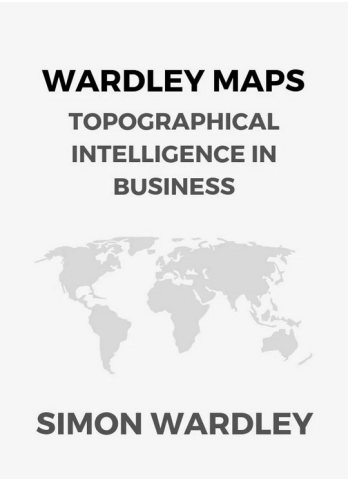


Understanding the value chain



Mapping the Current Landscape





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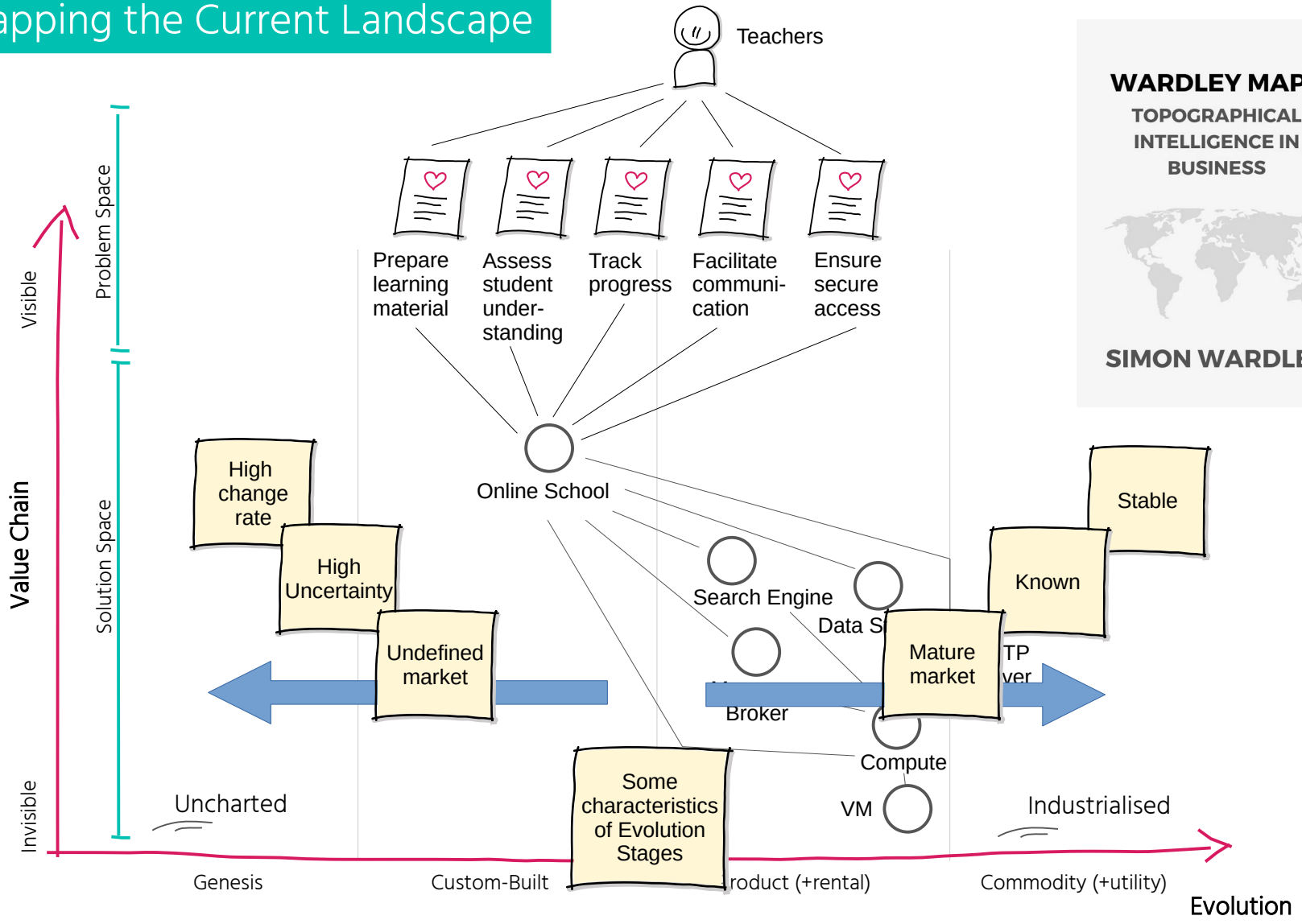

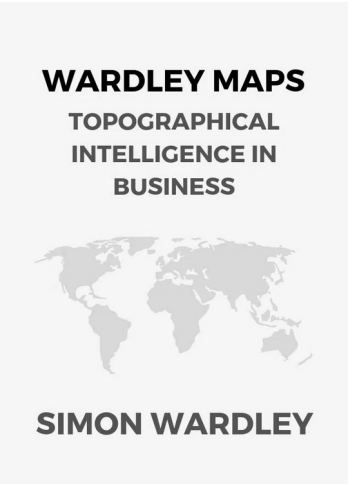

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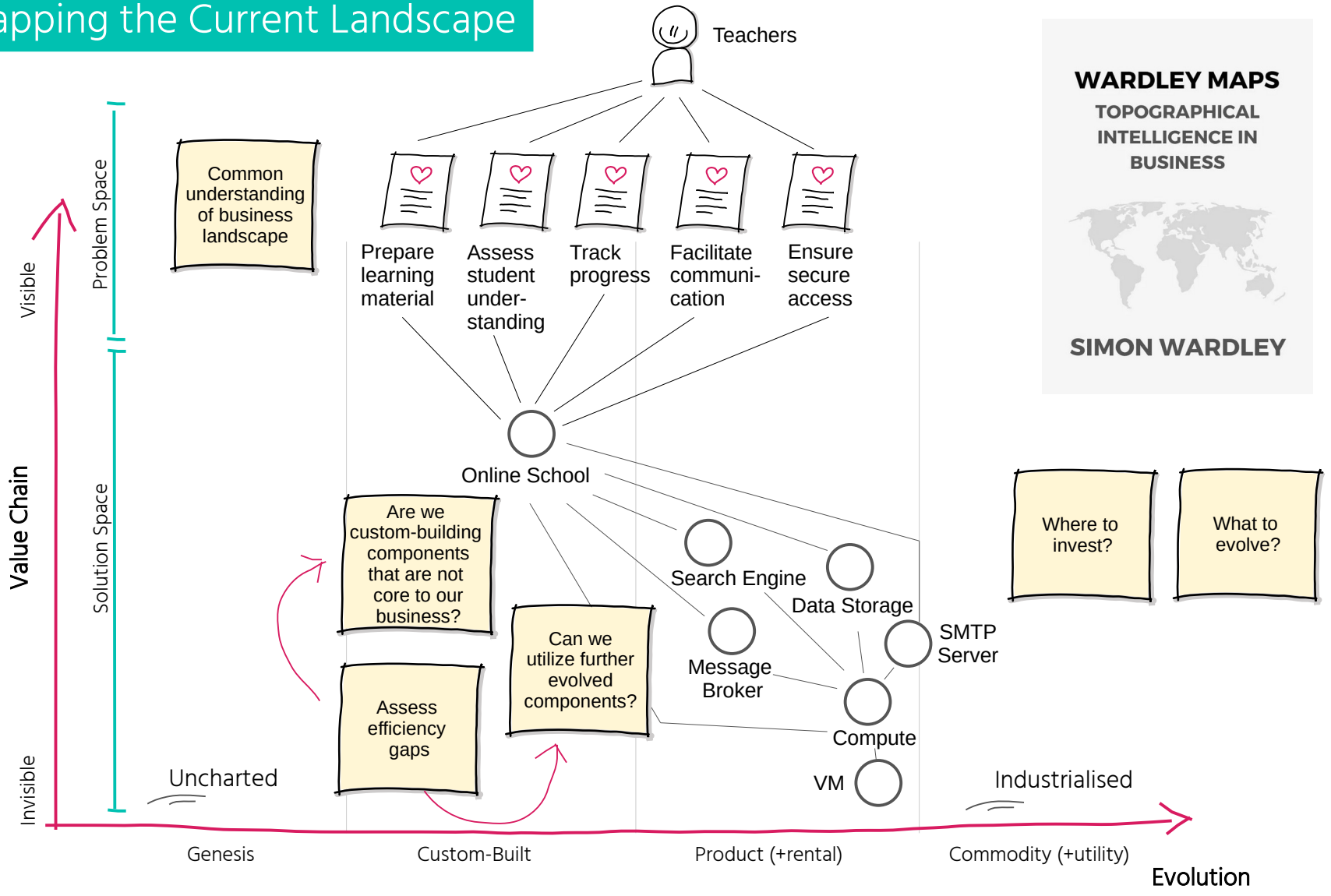

Categorizing the Problem Space

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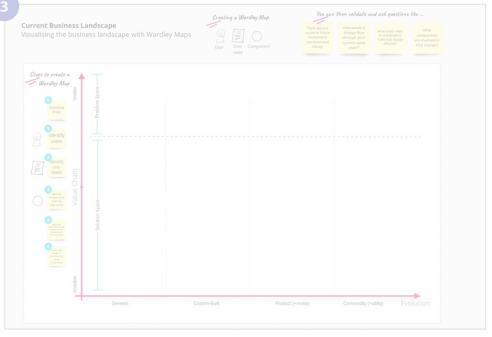
Visualising the business landscape with Wardley Maps



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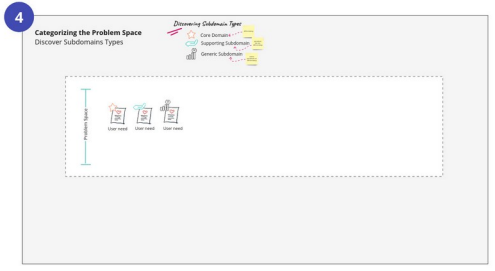
Categorizing the Problem Space

Discover Subdomains Types



INNOVATION!

TO-BE

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Modularity in the Solution Space

Decomposing solution space into bounded contexts (design decisions)

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Future Business Landscape & Bounded Contexts

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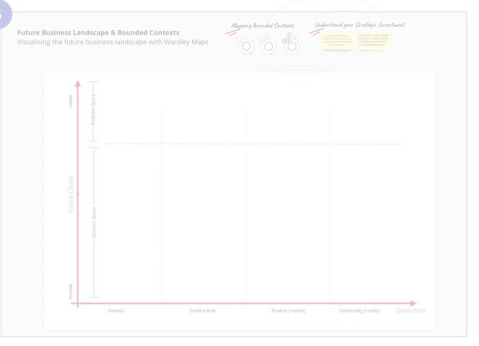

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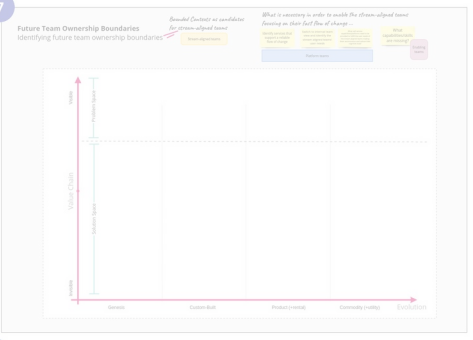
Identifying future team ownership boundaries



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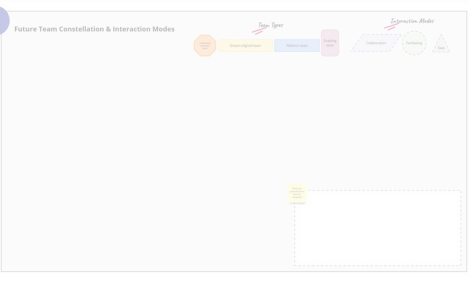

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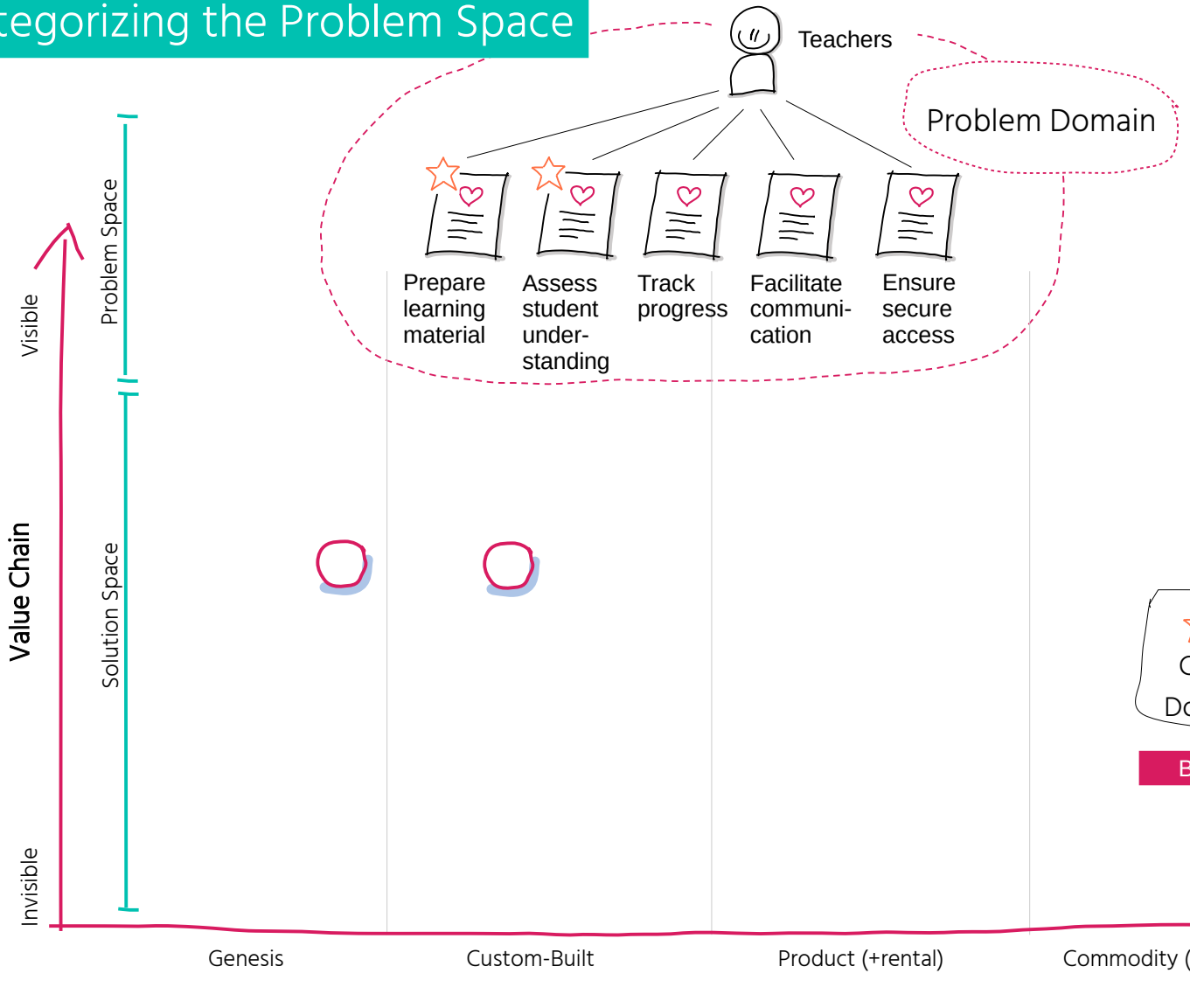
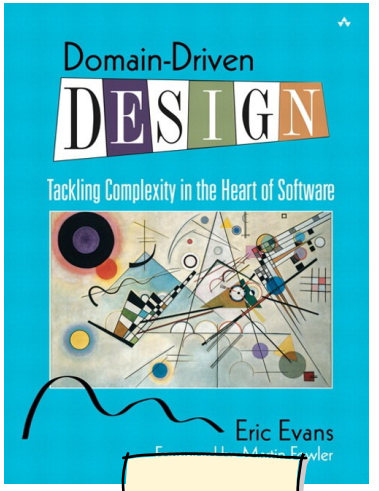


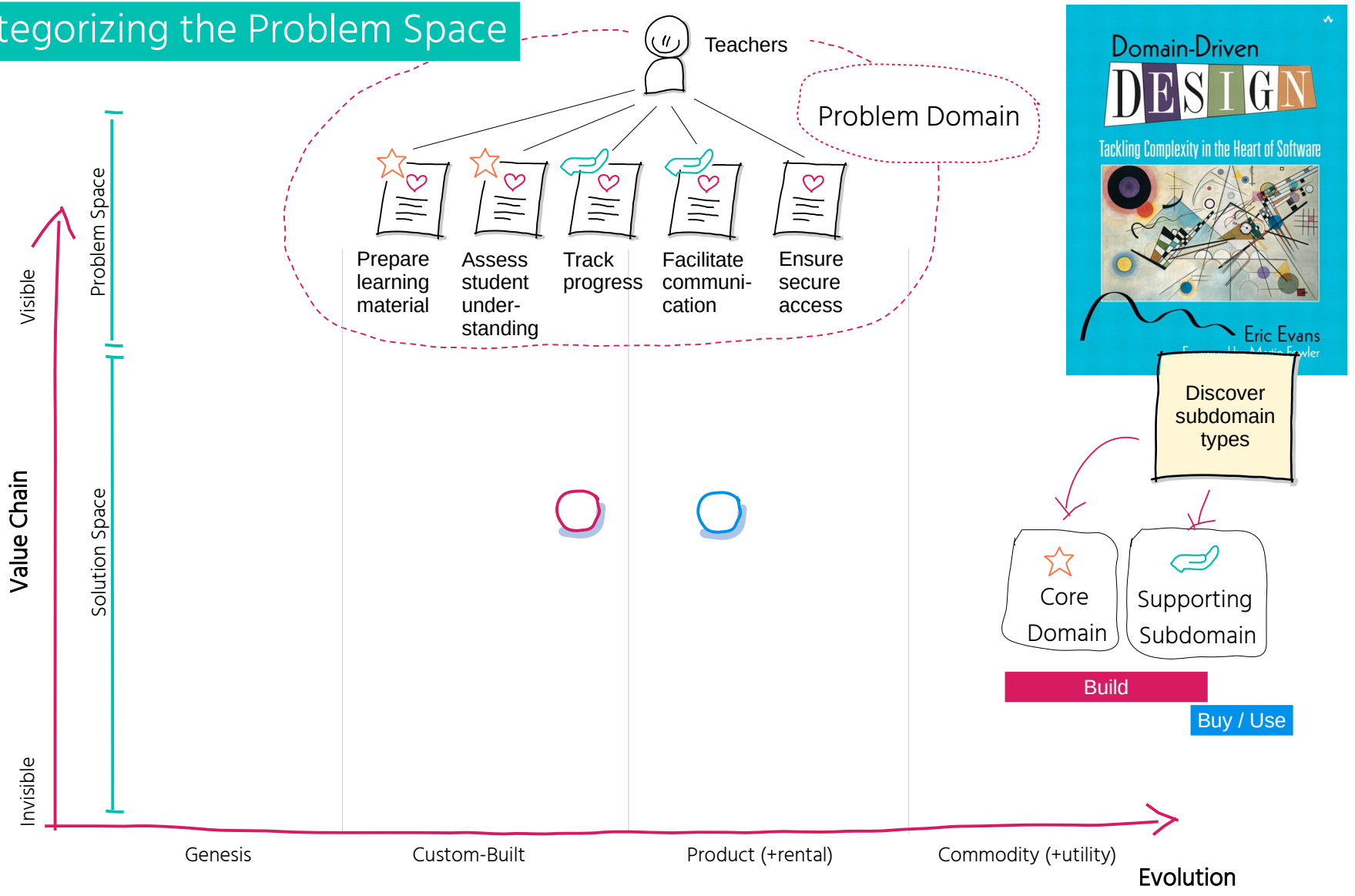


Discover subdomain types

Core Domain

Build

Categorizing the Problem Space



Discover subdomain types

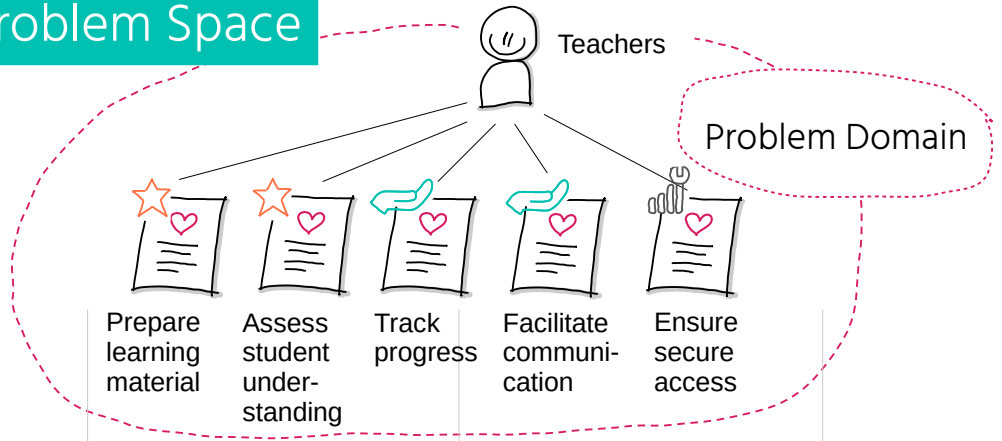
Core Domain

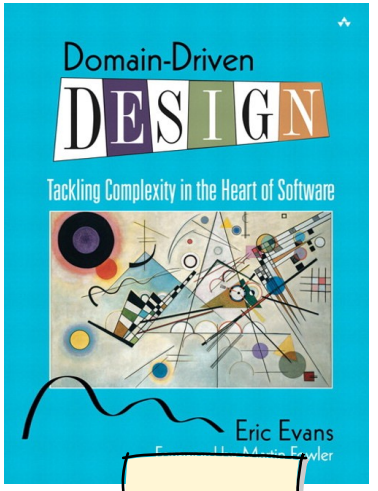
Supporting Subdomain

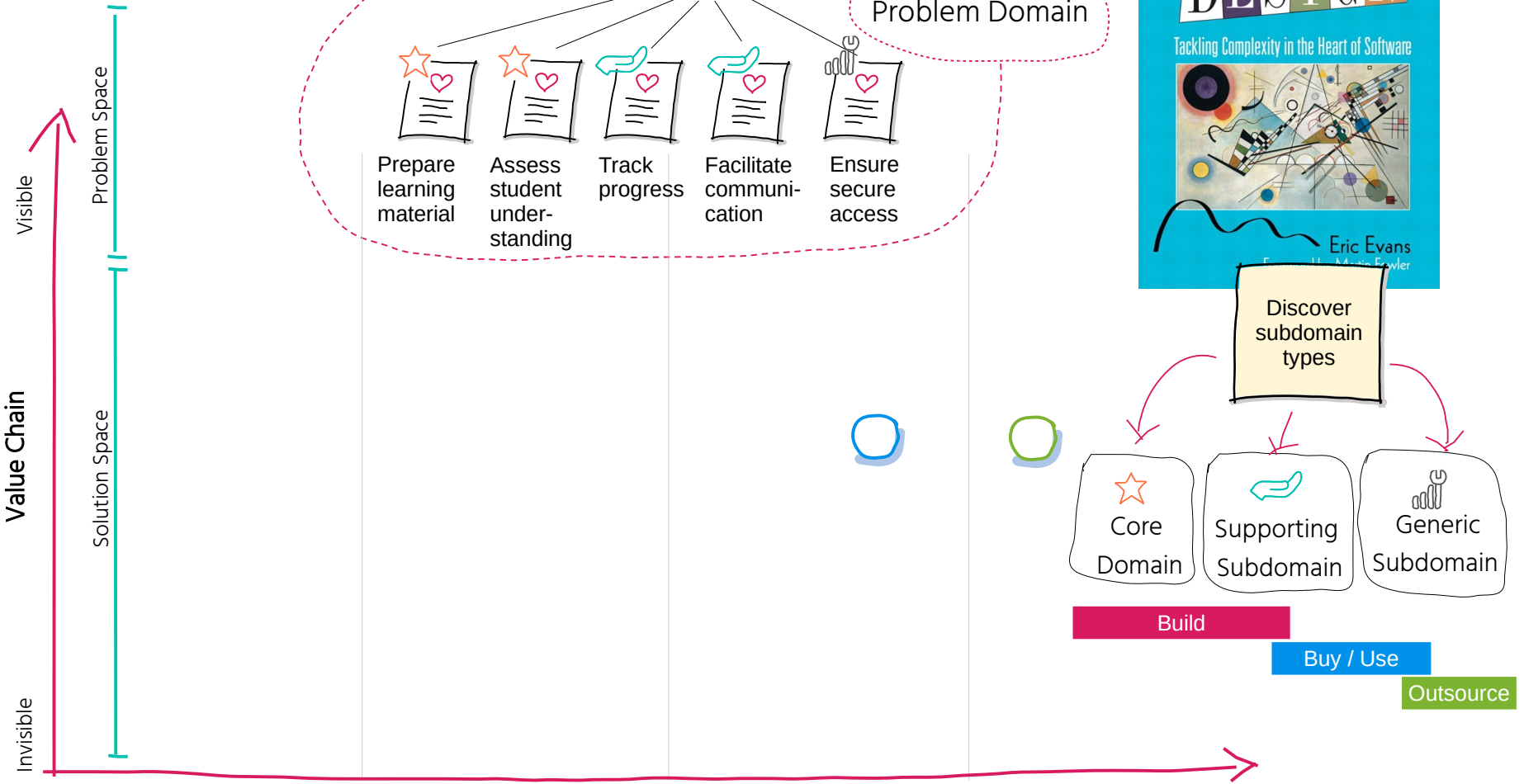
Build

Buy / Use

Categorizing the Problem Space







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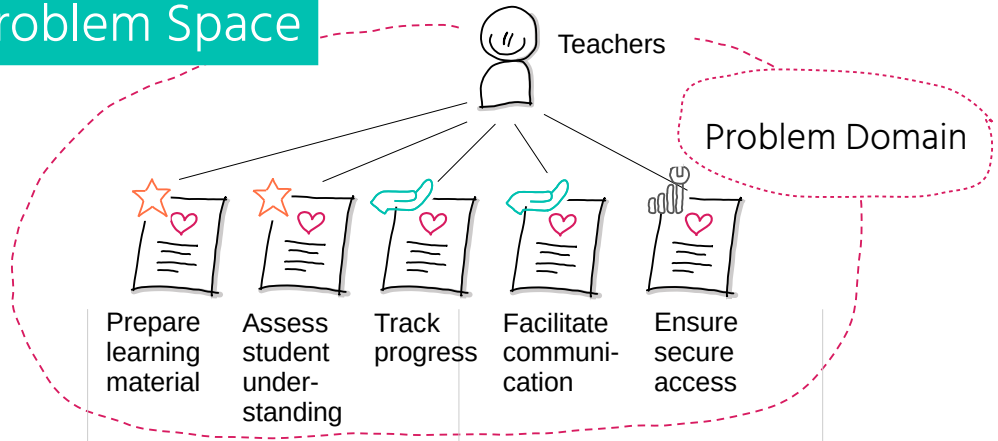

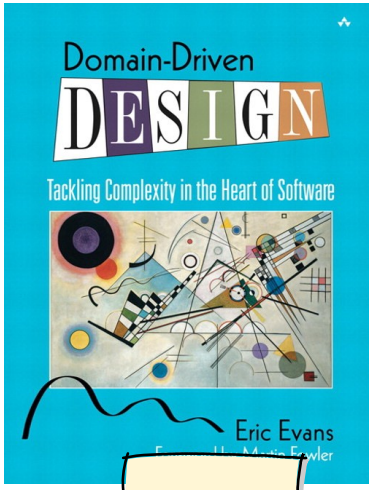

Discover subdomain types

Core Domain

Supporting Subdomain

Generic Subdomain

Strategic investment

Build/buy/outsource decisions

Build

Buy / Use

Outsource

Visible

Invisible

Problem Space

Solution Space

Value Chain

Genesis

Custom-Built

Product (+rental)

Commodity (+utility)

Evolution

As-Is

To-Be

Analyzing Current Teams

Assessing Flow of Change

Visualising Current Landscape

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Modularizing Solution Space

Visualising Future Landscape

Deriving Future Team Organization

@suksr

Modularizing the Solution Space

As-Is | To-Be

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Discover Subdomains Types

UNLEARN!

TO-BE

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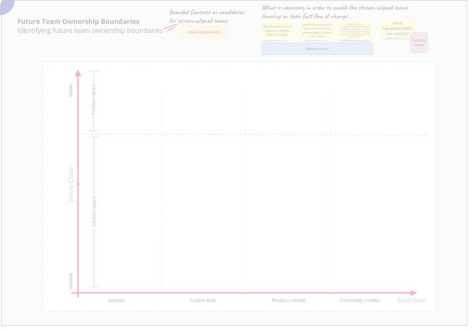

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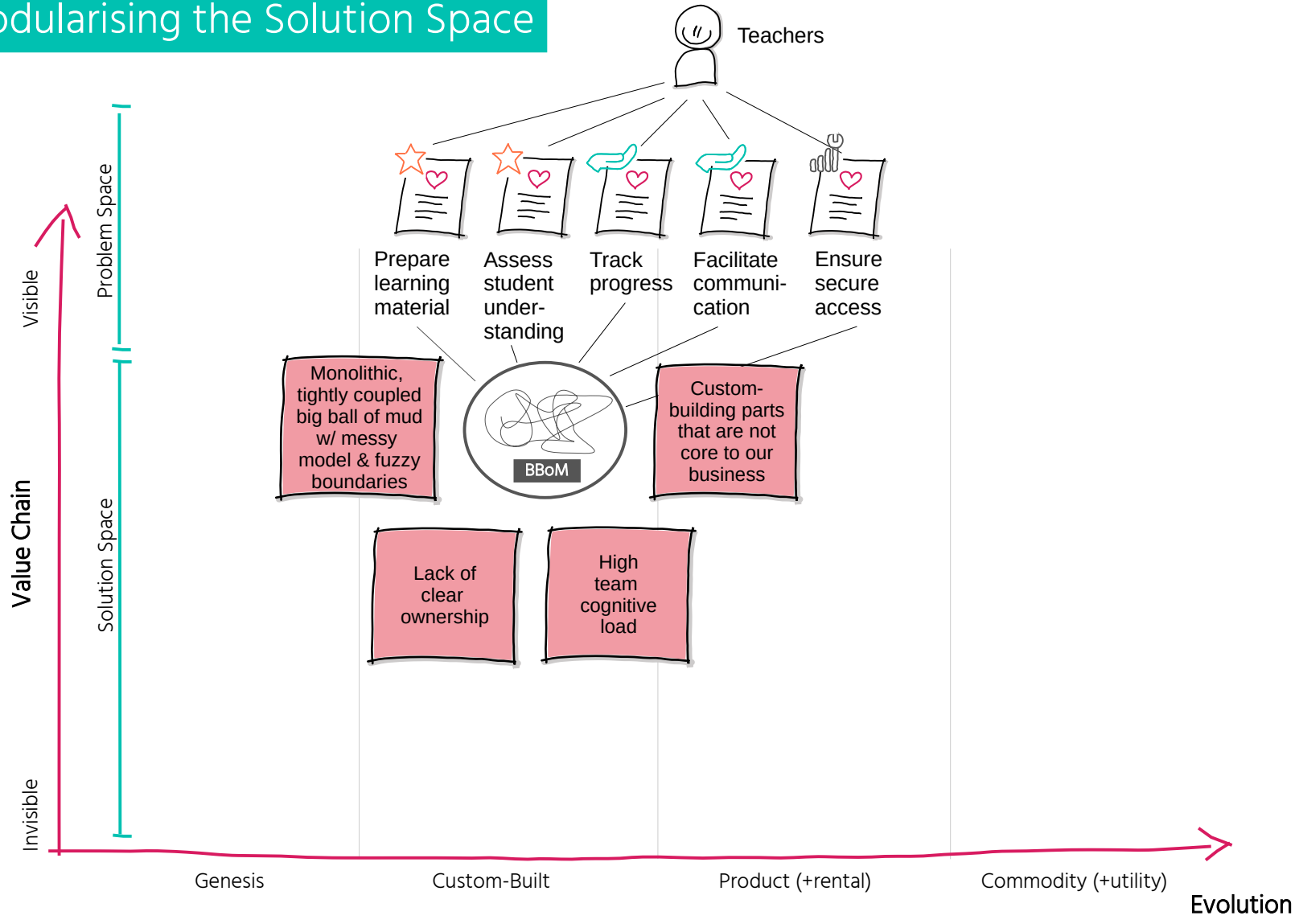
Modularising the Solution Space



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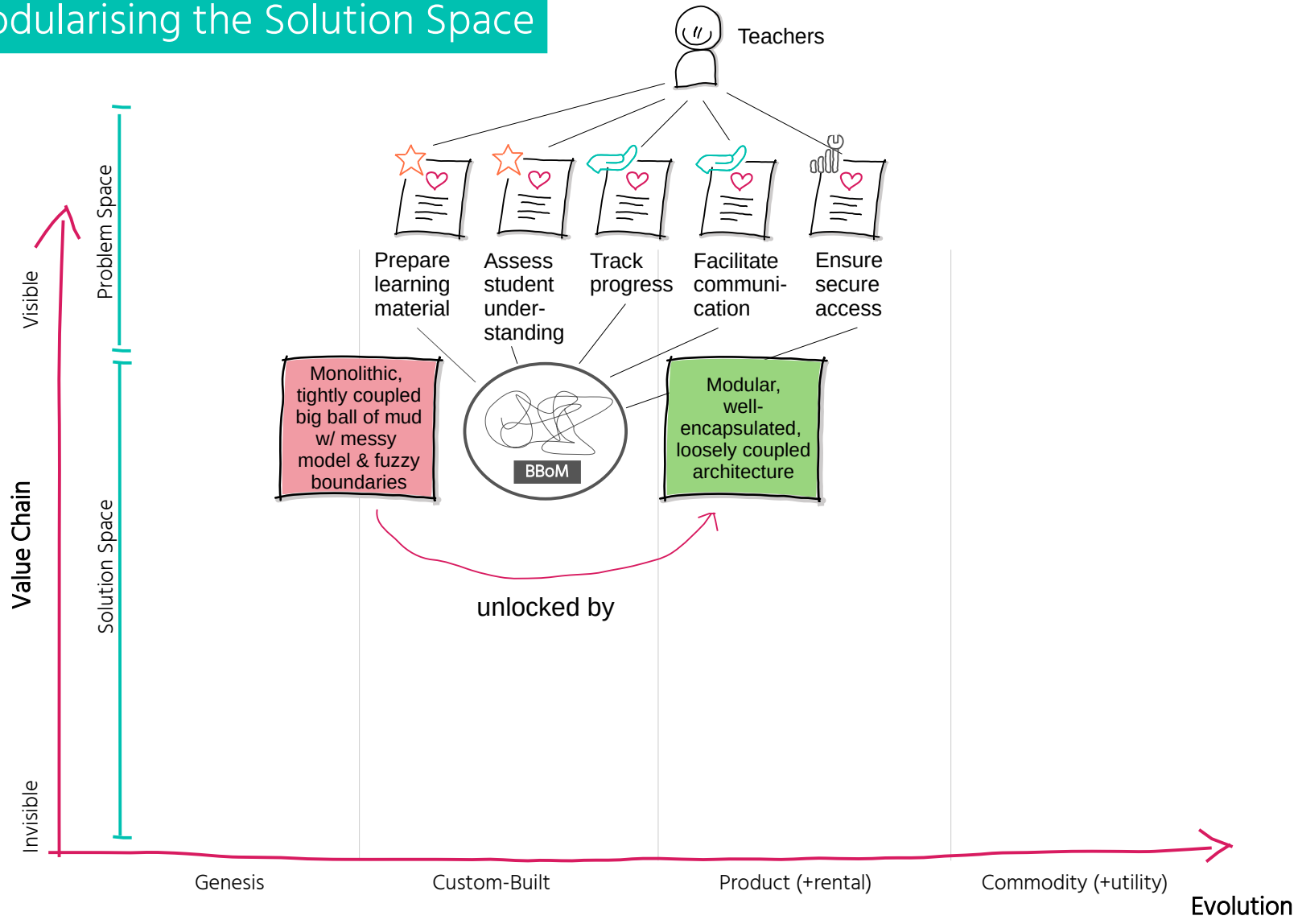

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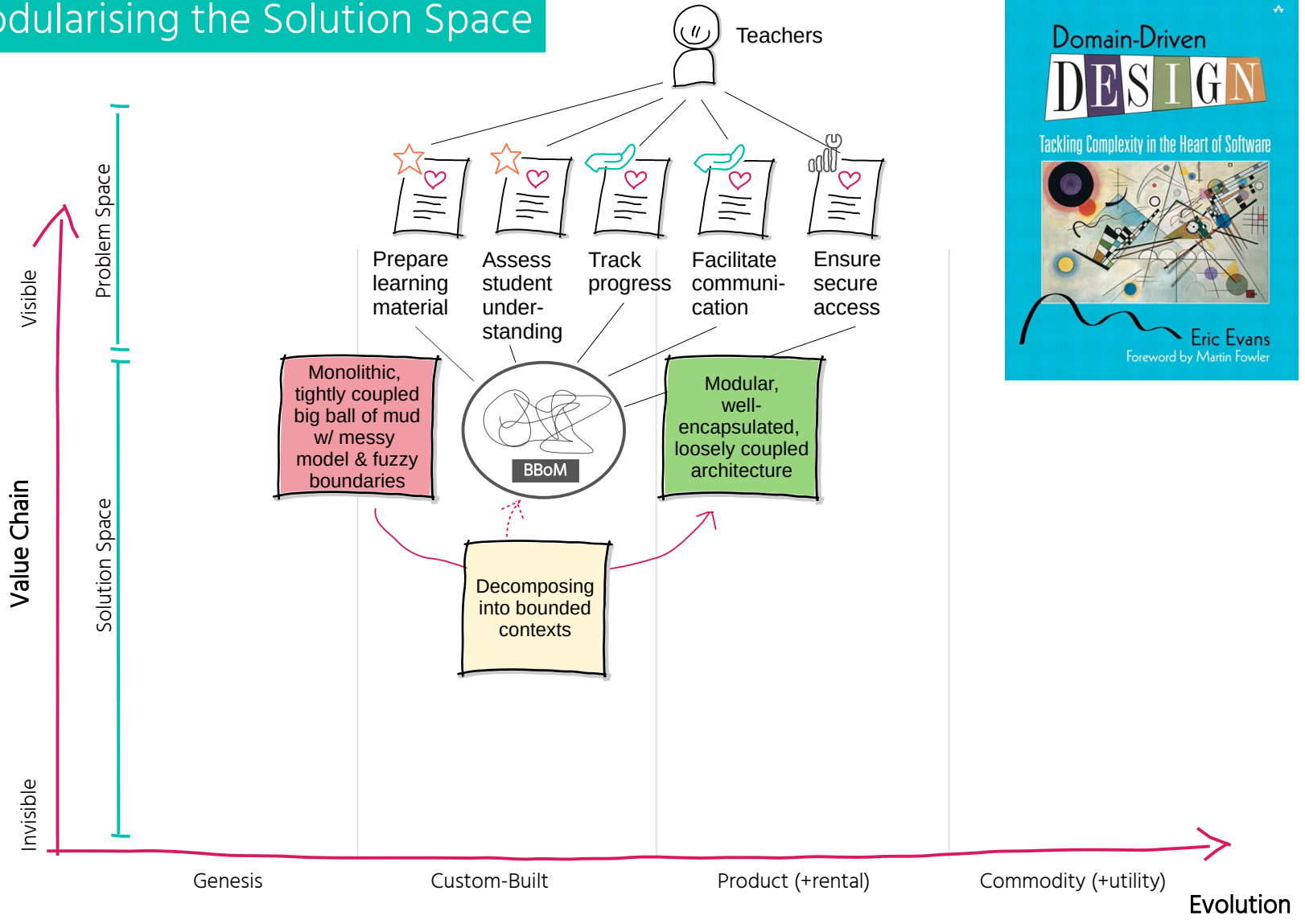

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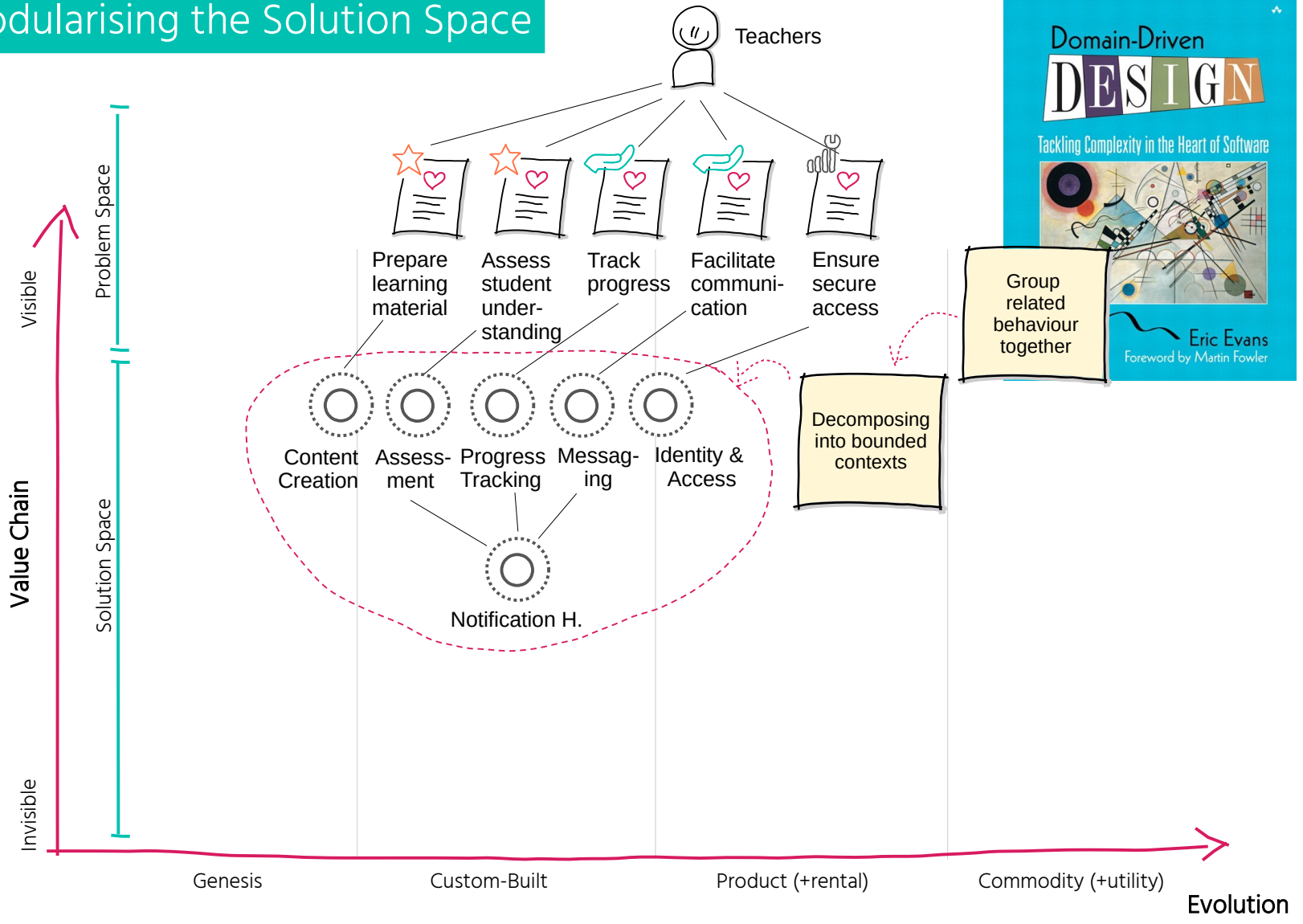

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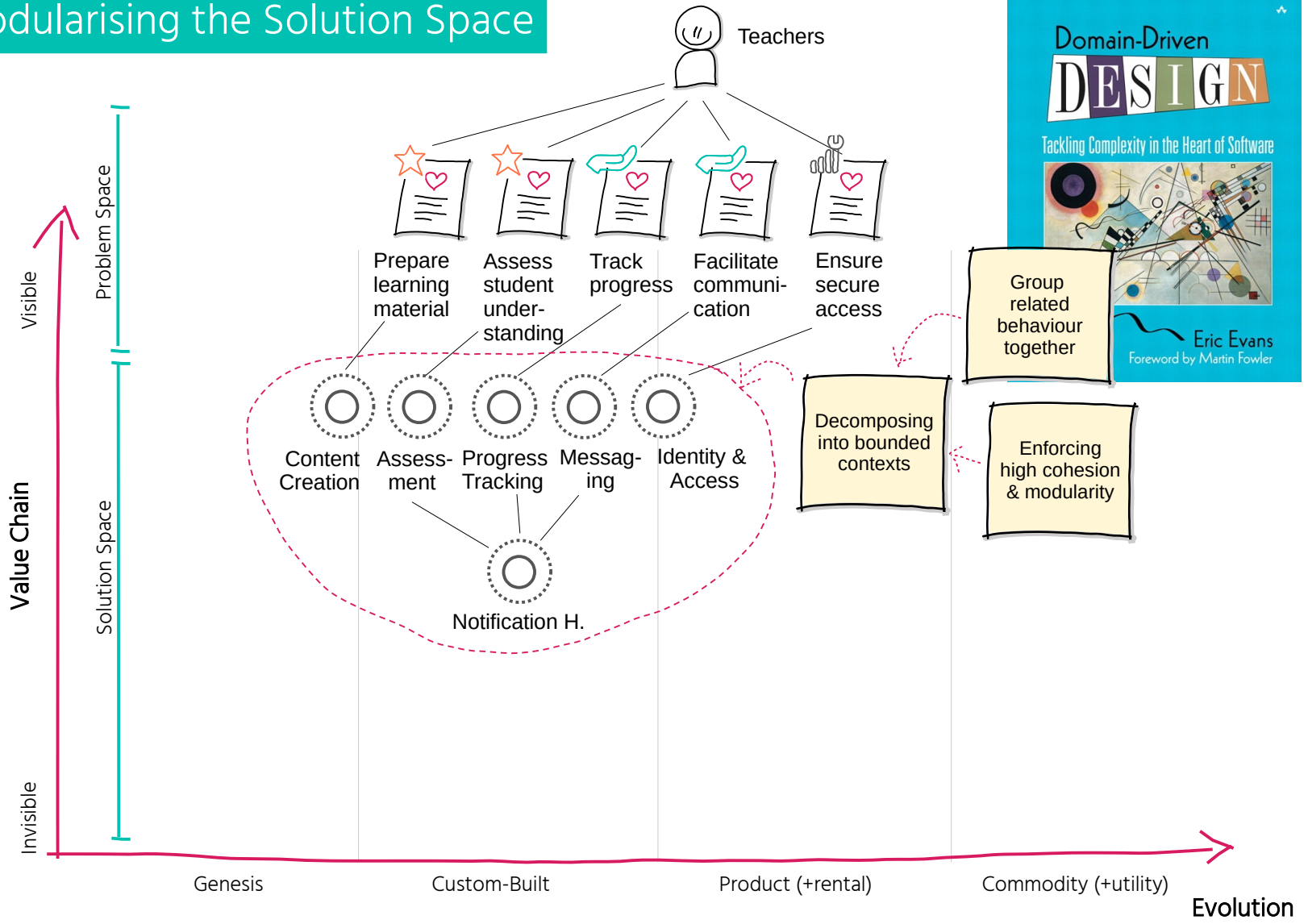

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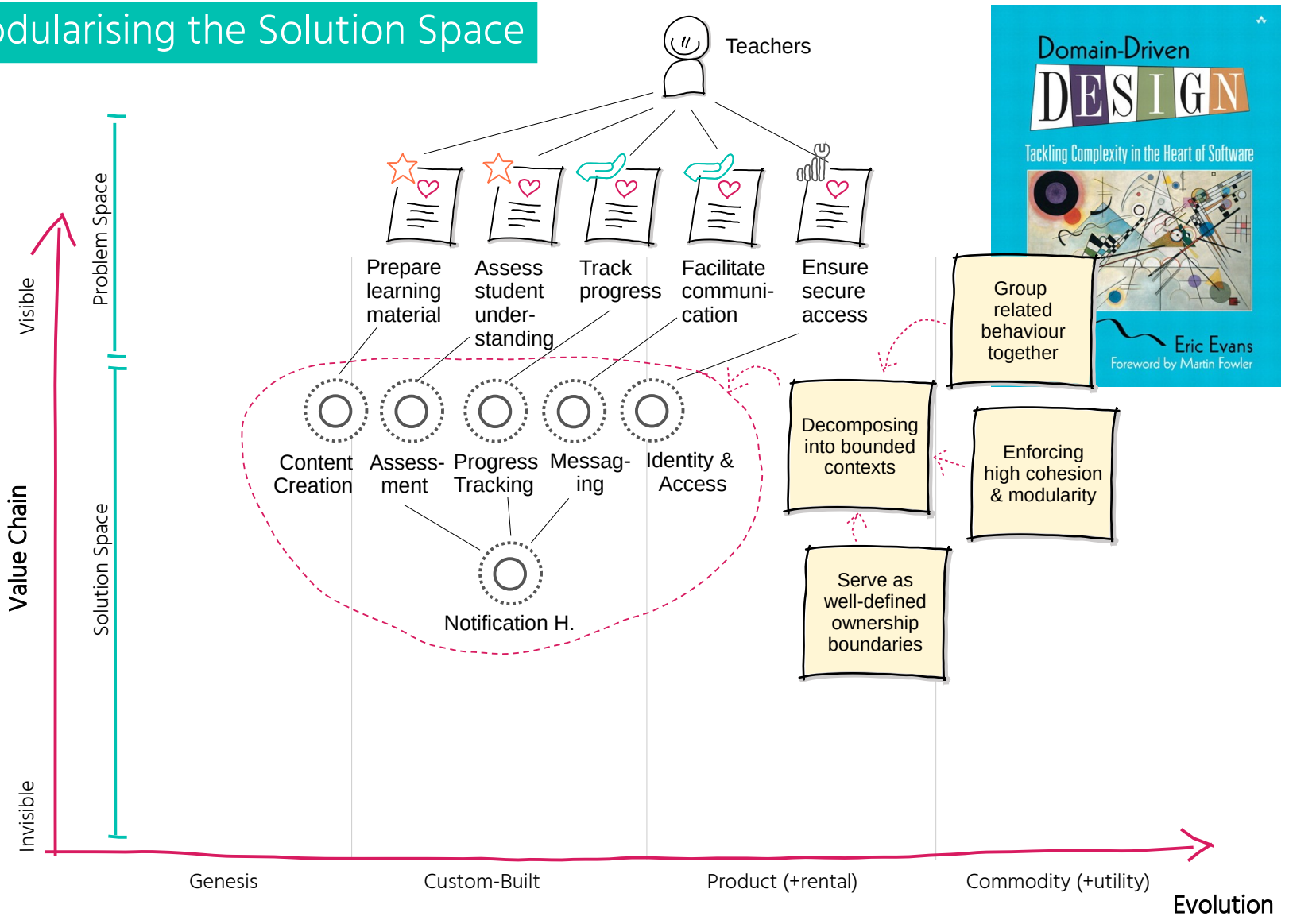

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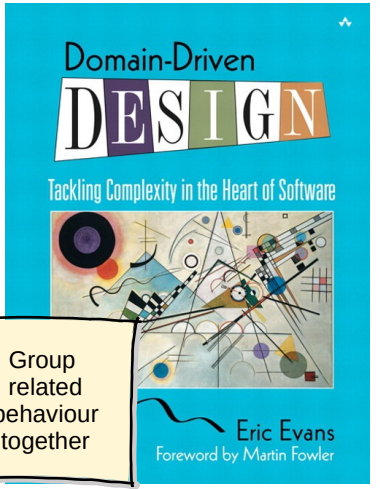

Teachers

Prepare learning material

Assess student under-standing

Track progress

Facilitate communi-cation

Ensure secure access

Content Creation

Assess-ment

Progress Tracking

Messag-ing

Identity & Access

Notification H.

Group related behaviour together

Decomposing into bounded contexts

Enforcing high cohesion & modularity

Serve as well-defined ownership boundaries

Domain Experts

Developers

Available Techniques:
- EventStorming
- Domain Storytelling
- Example Mapping
- Userstory Mapping
- etc.

Visible

Invisible

Problem Space

Solution Space

Value Chain

Genesis

Custom-Built

Product (+rental)

Commodity (+utility)

Evolution

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As-Is

To-Be

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Visualizing the Future Landscape

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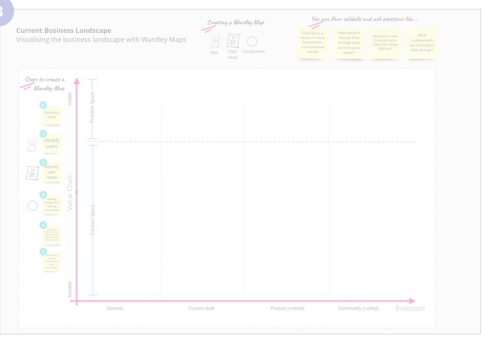

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Discover Subdomains Types

INNOVATION!

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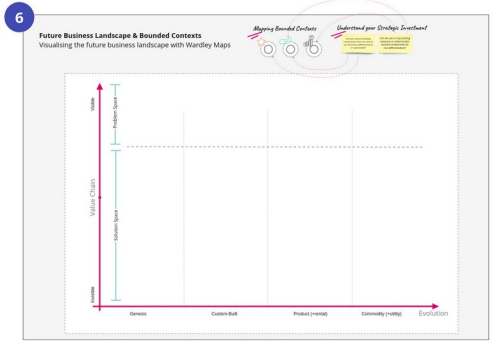

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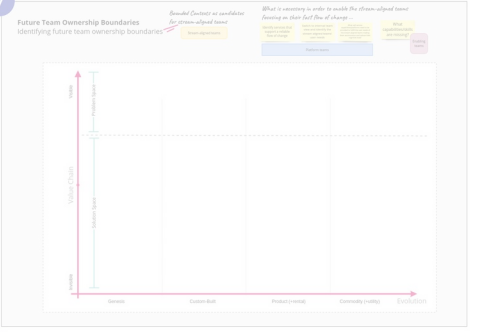

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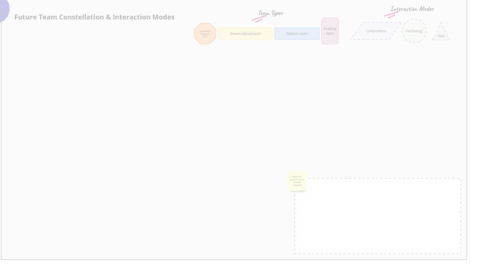

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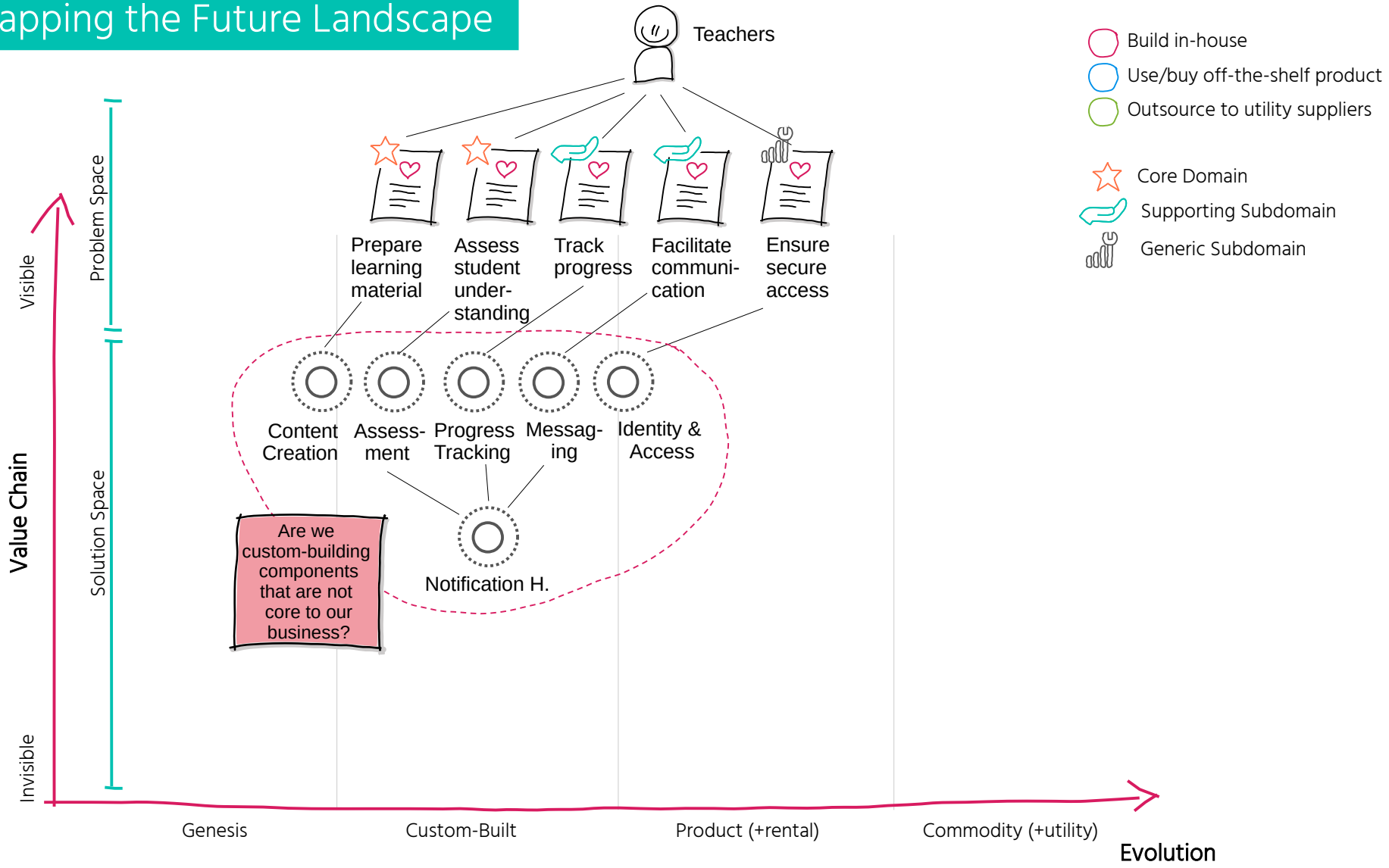

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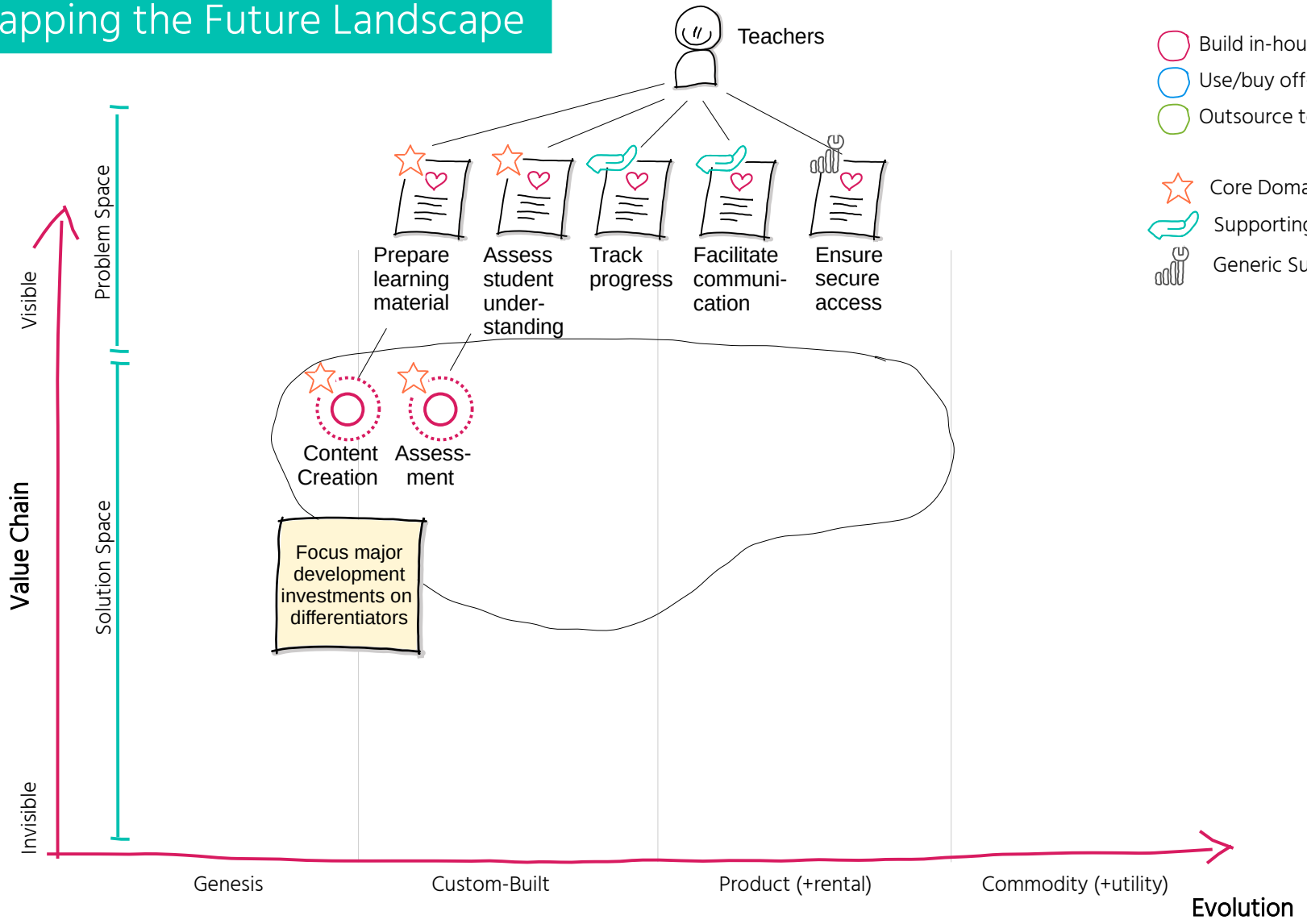

- Build in-house
- Use/buy off-the-shelf product
- Outsource to utility suppliers

- Core Domain
- Supporting Subdomain
- Generic Subdomain

As-Is
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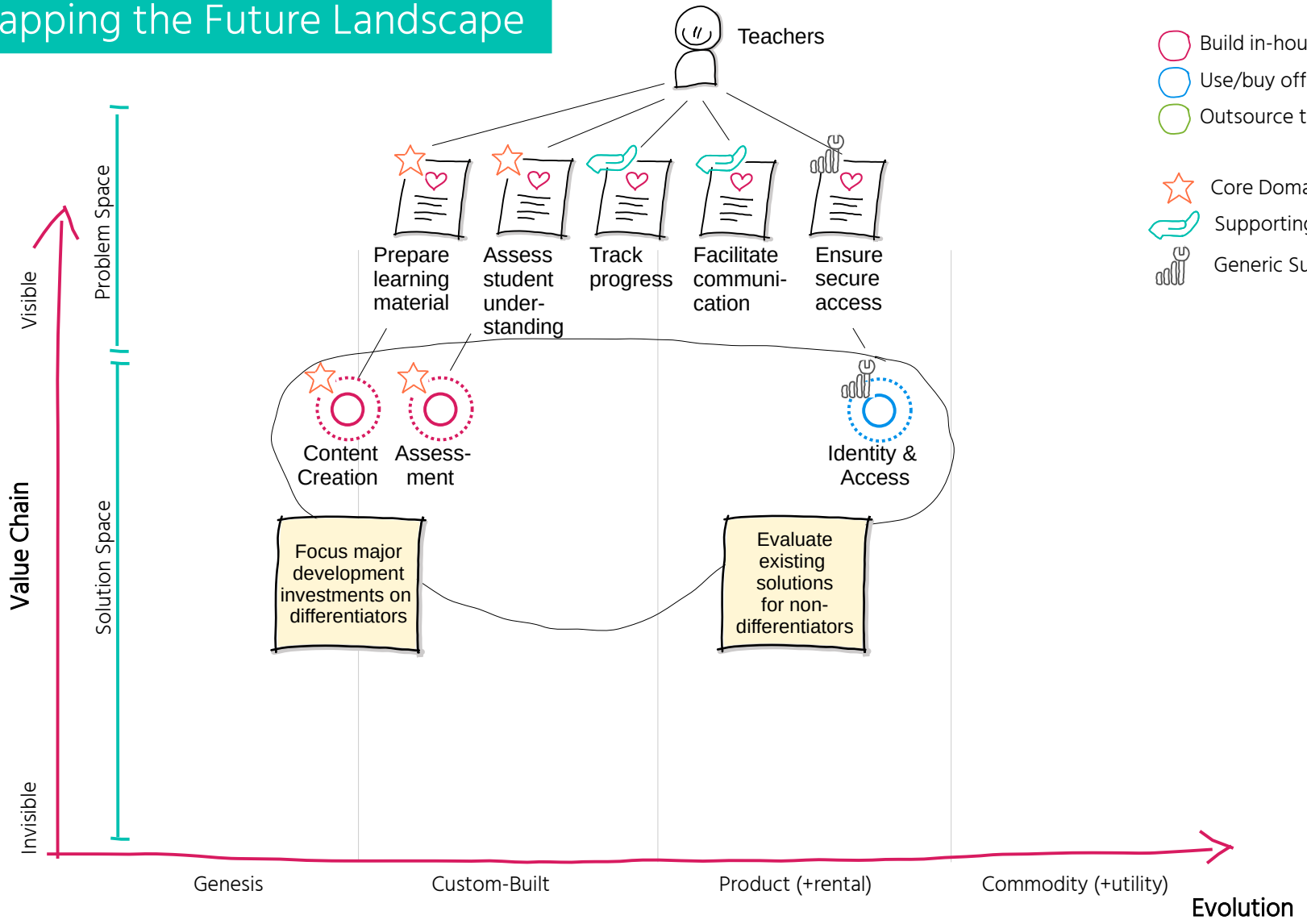

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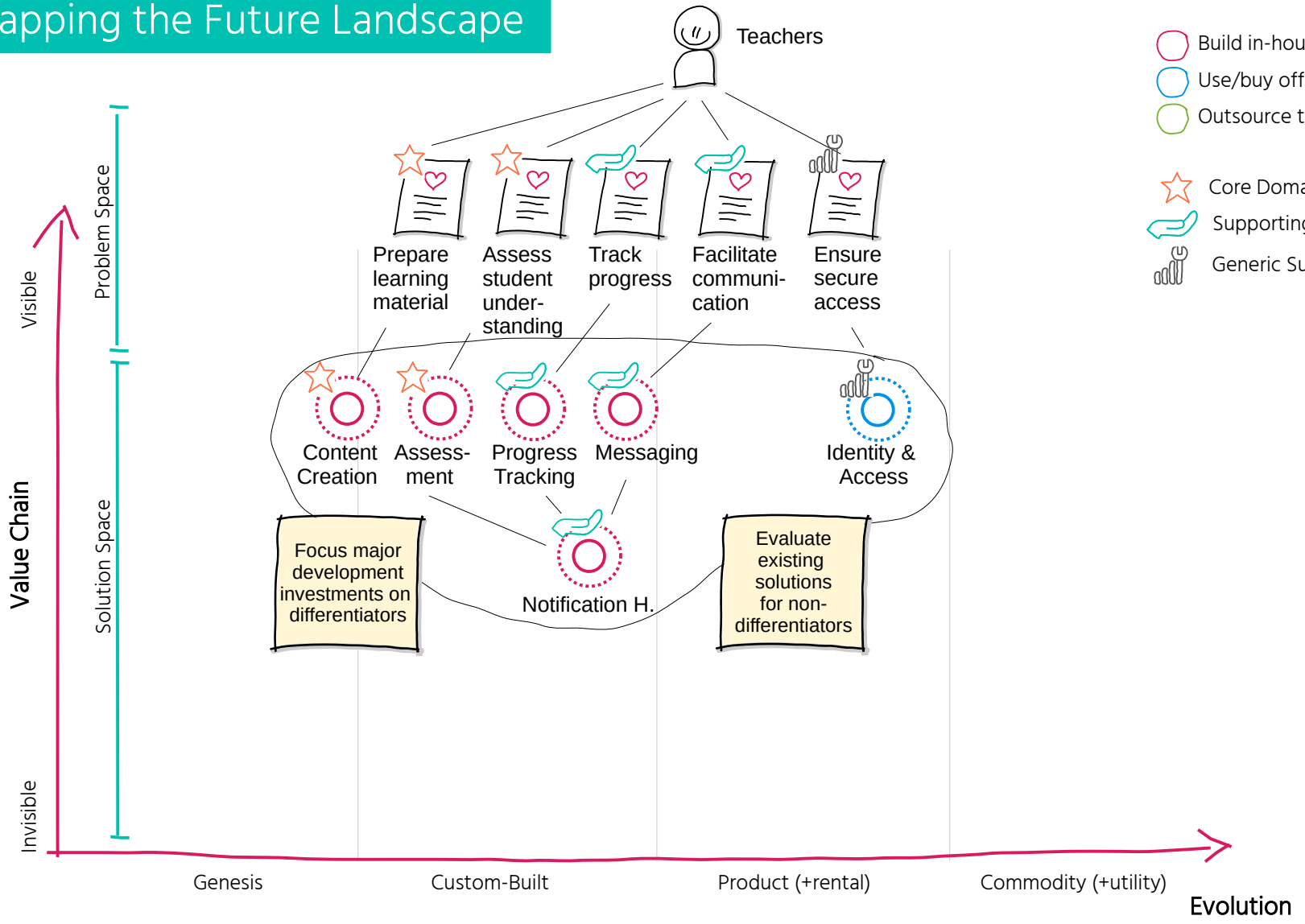

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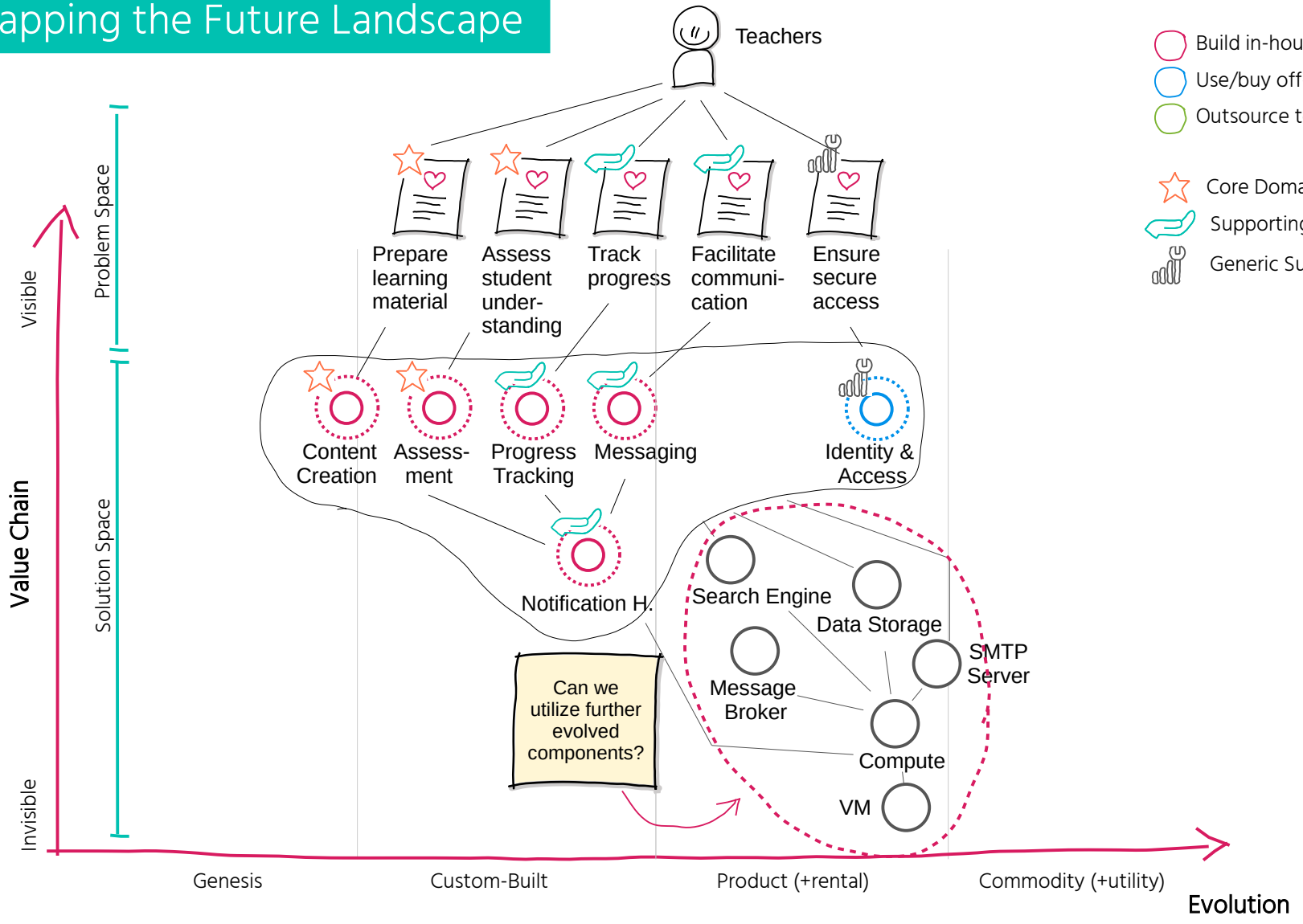

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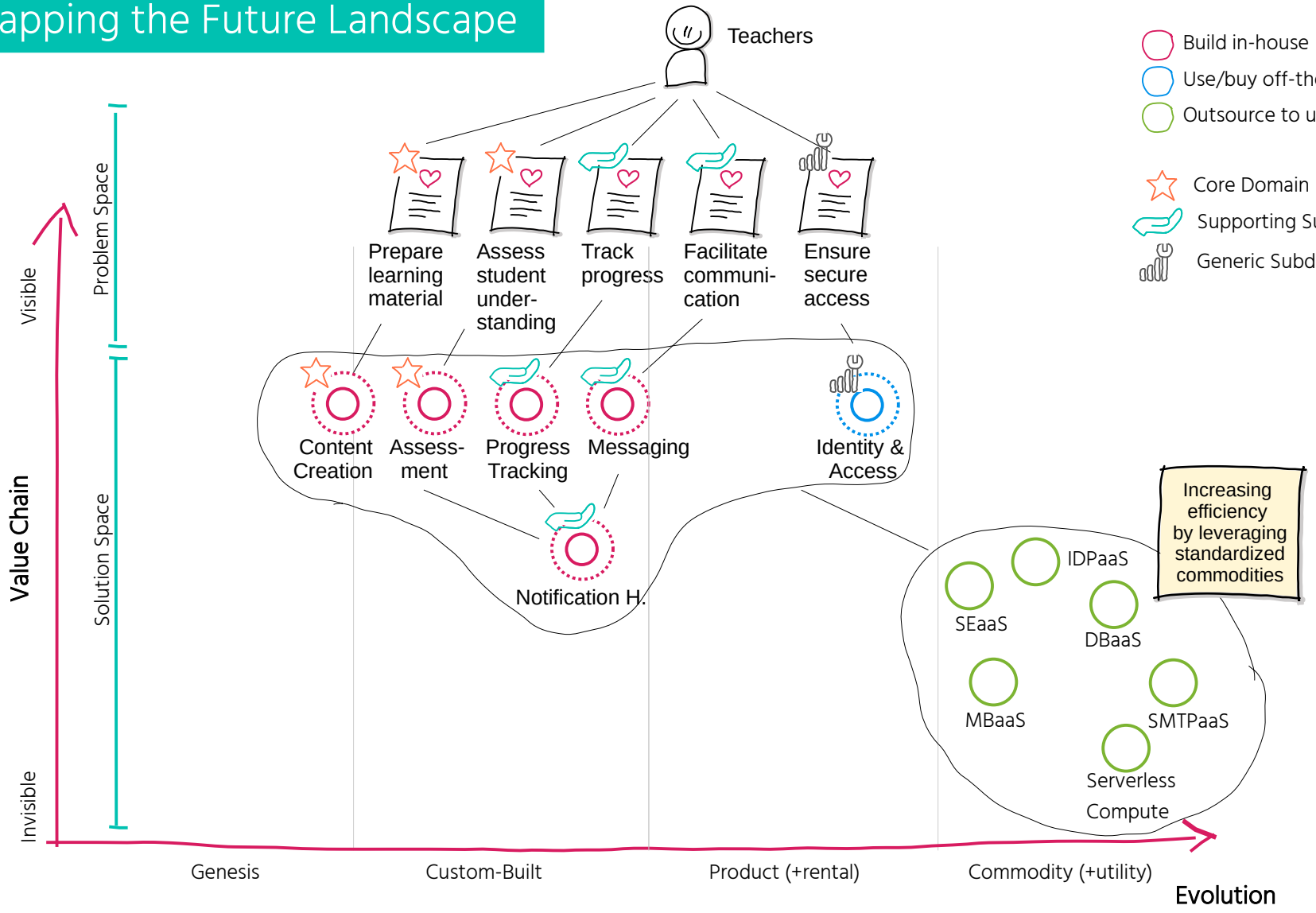

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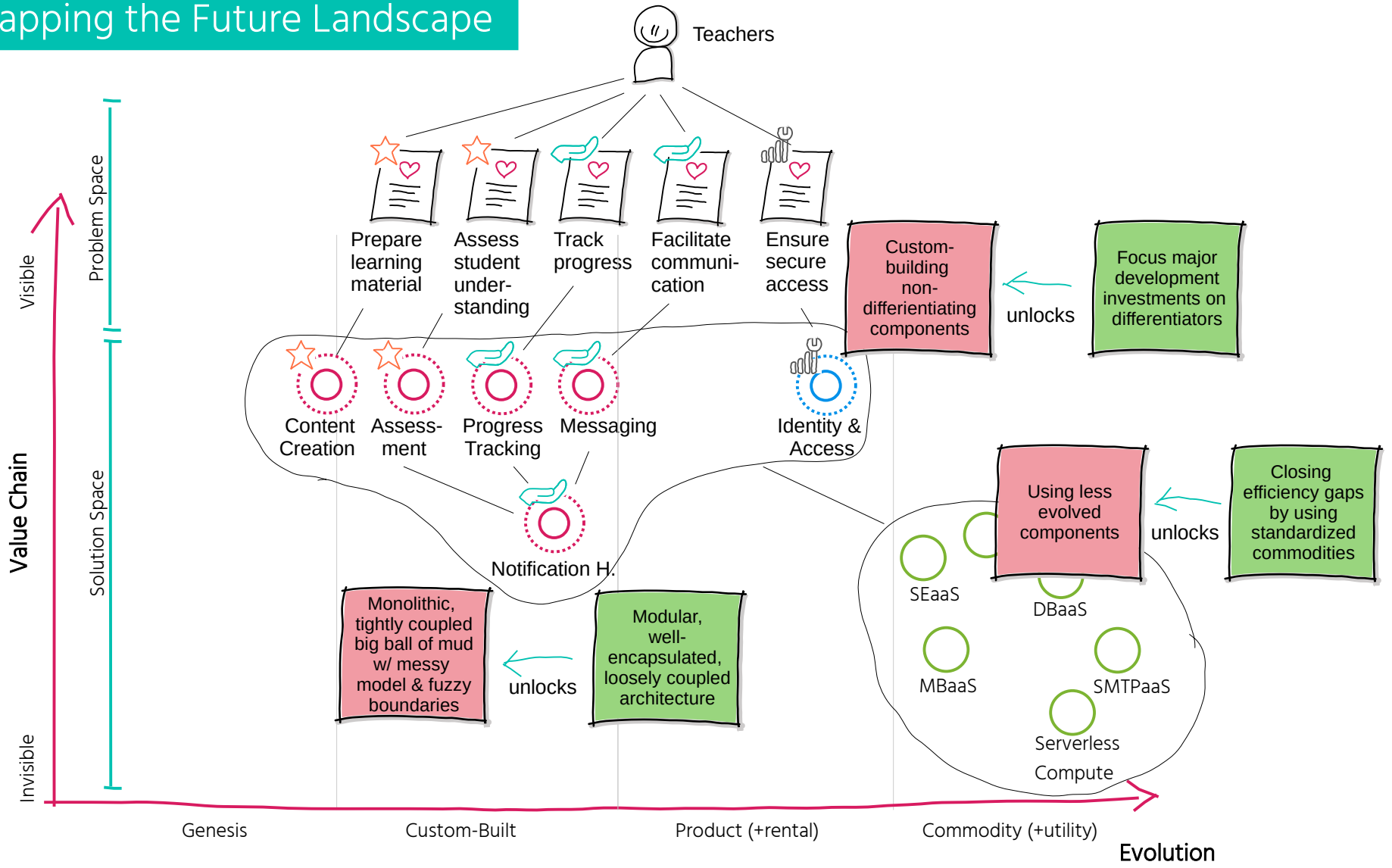

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Future Team Organization

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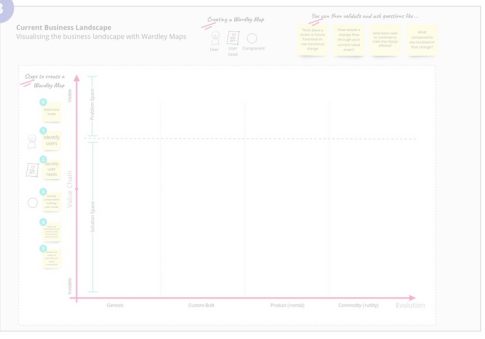

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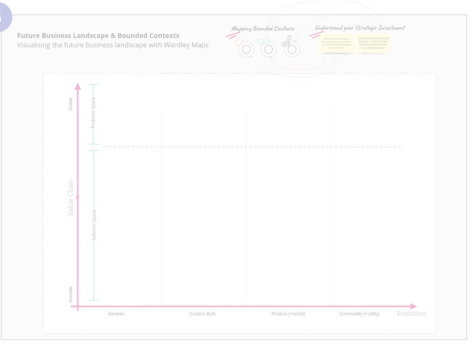

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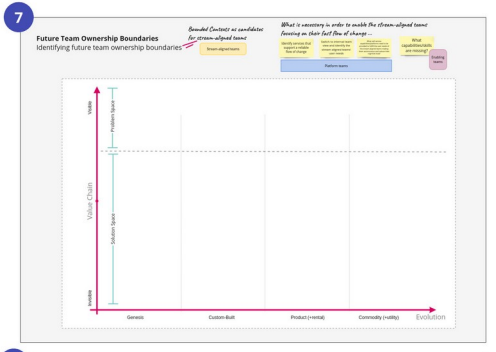

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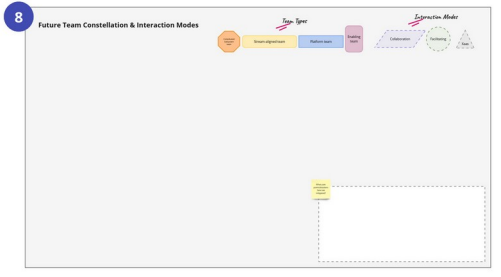

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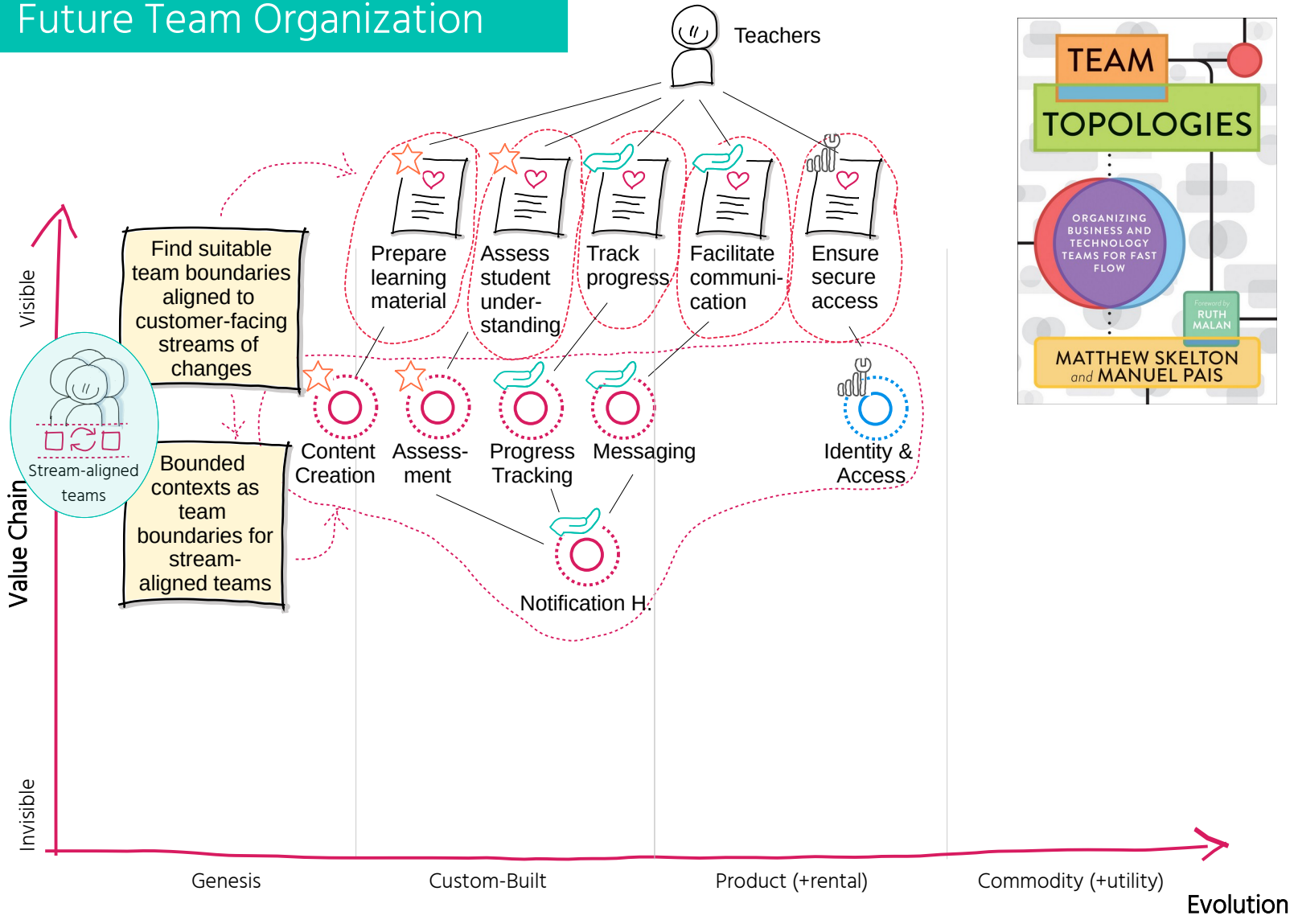

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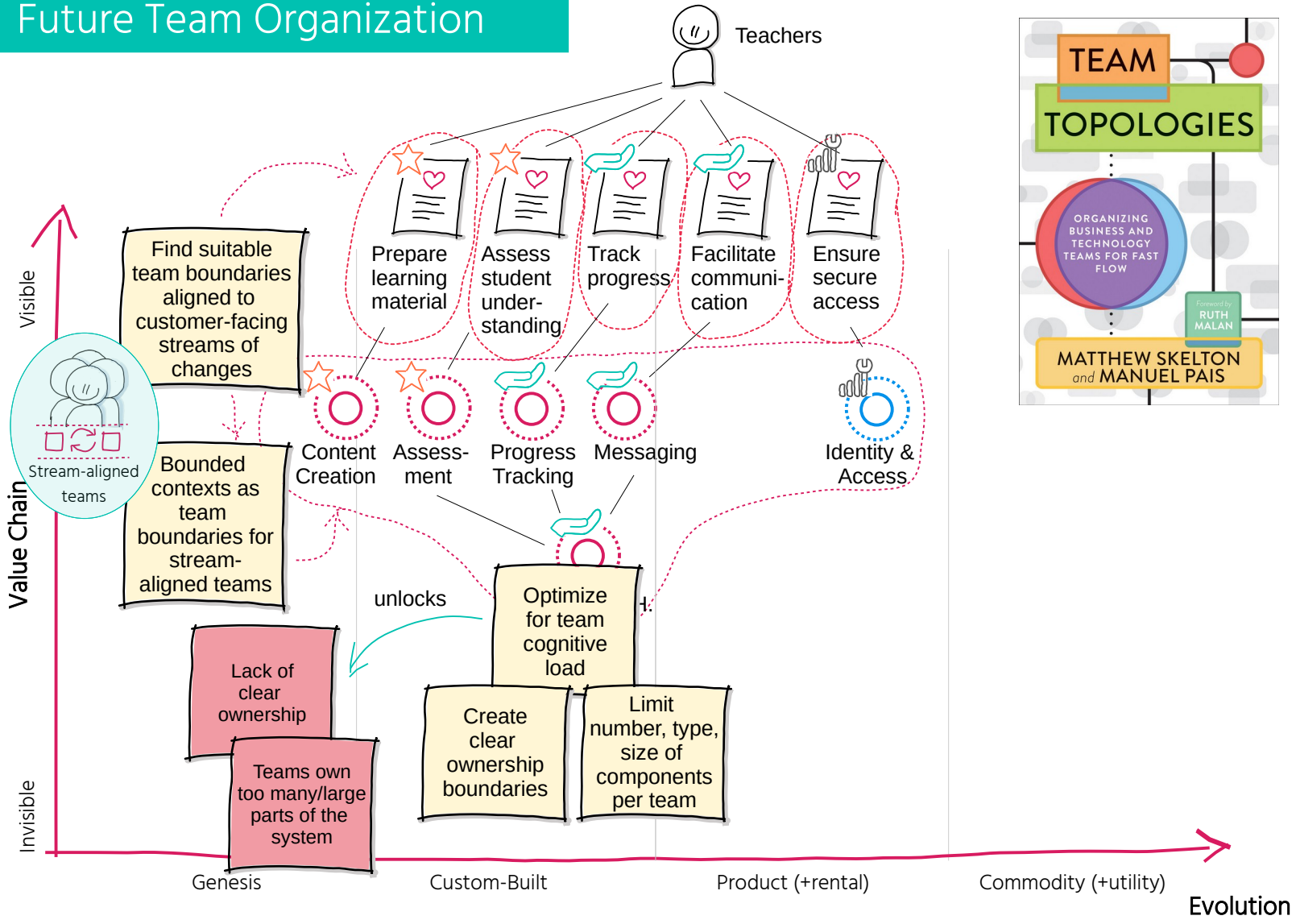

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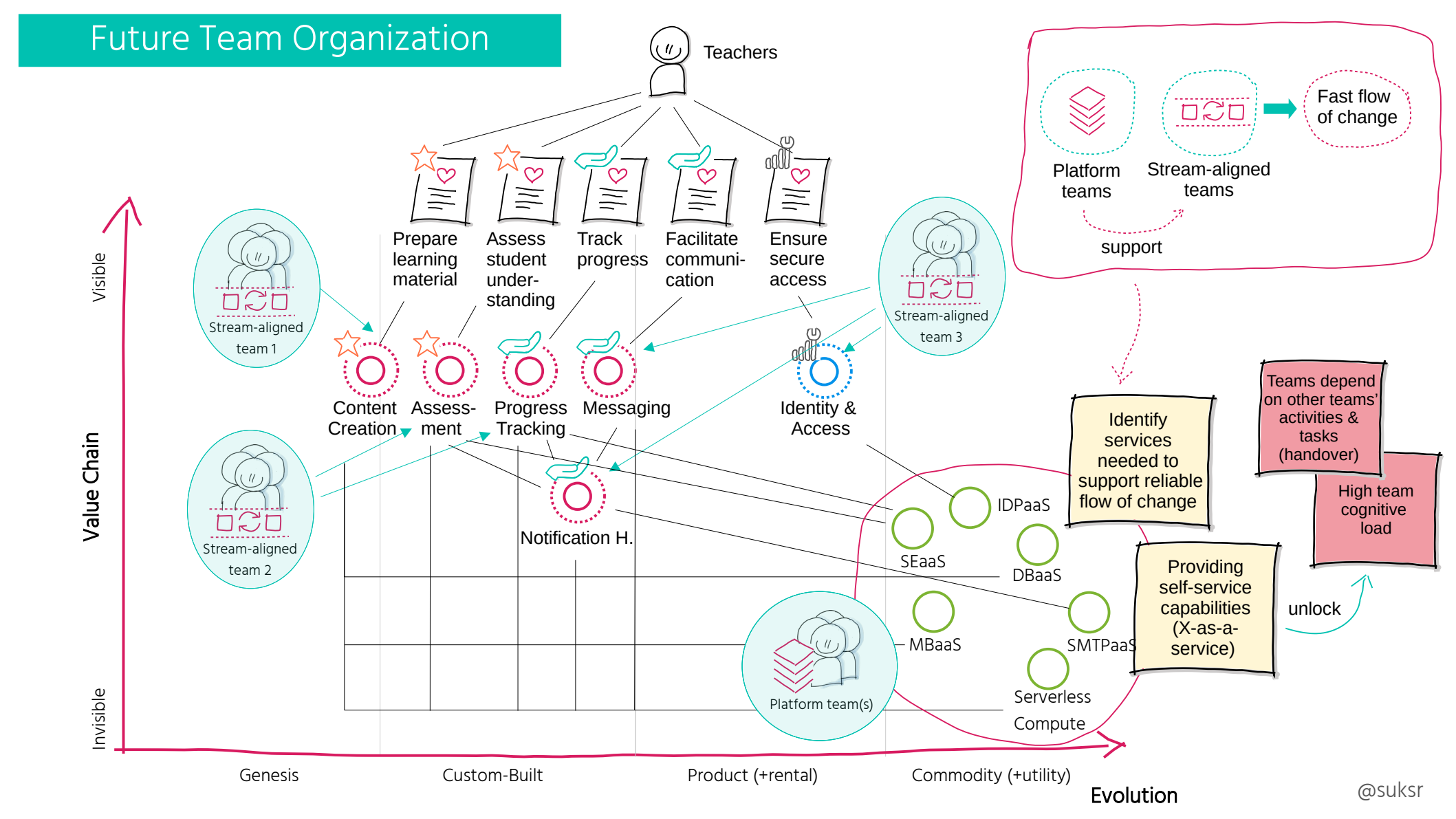
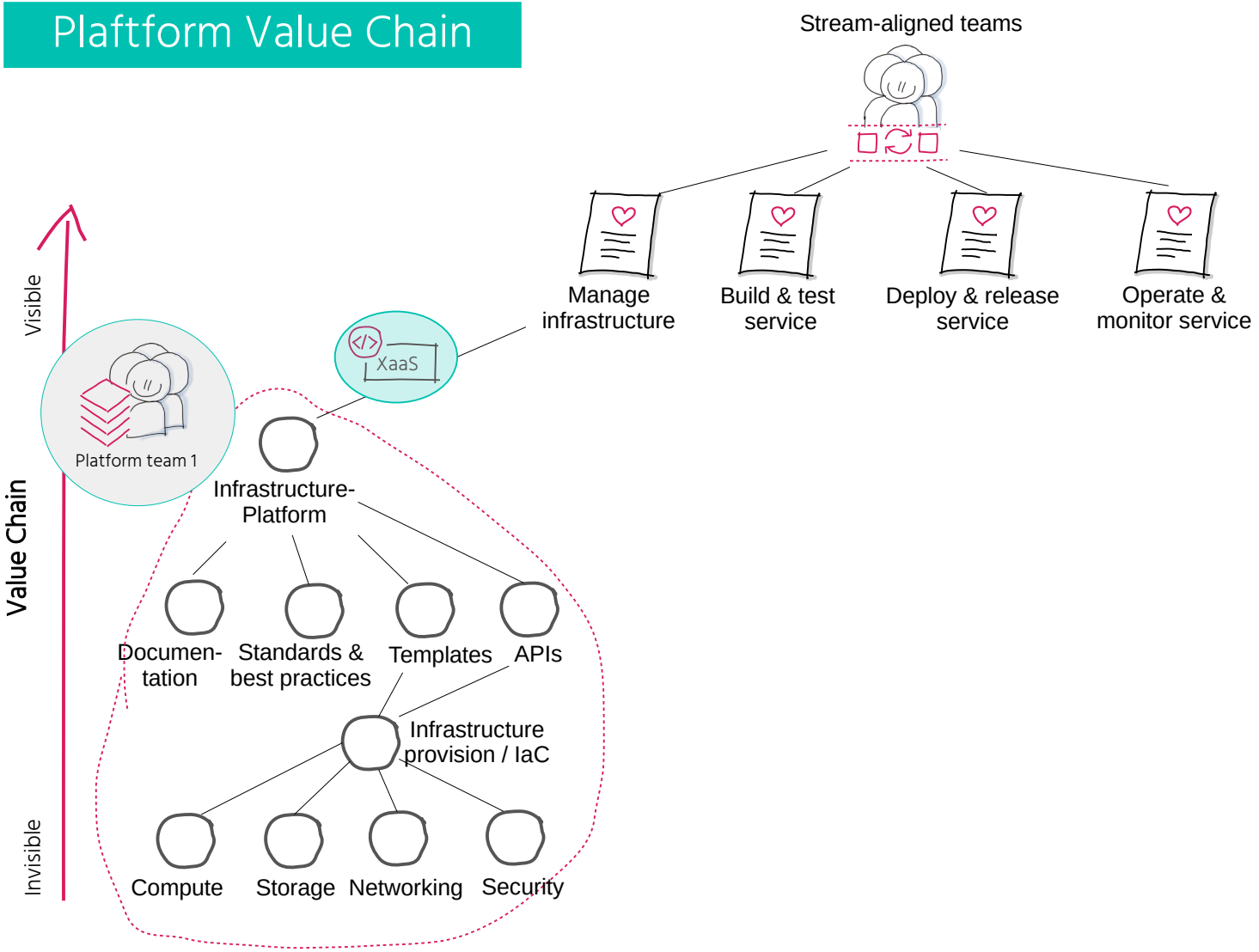
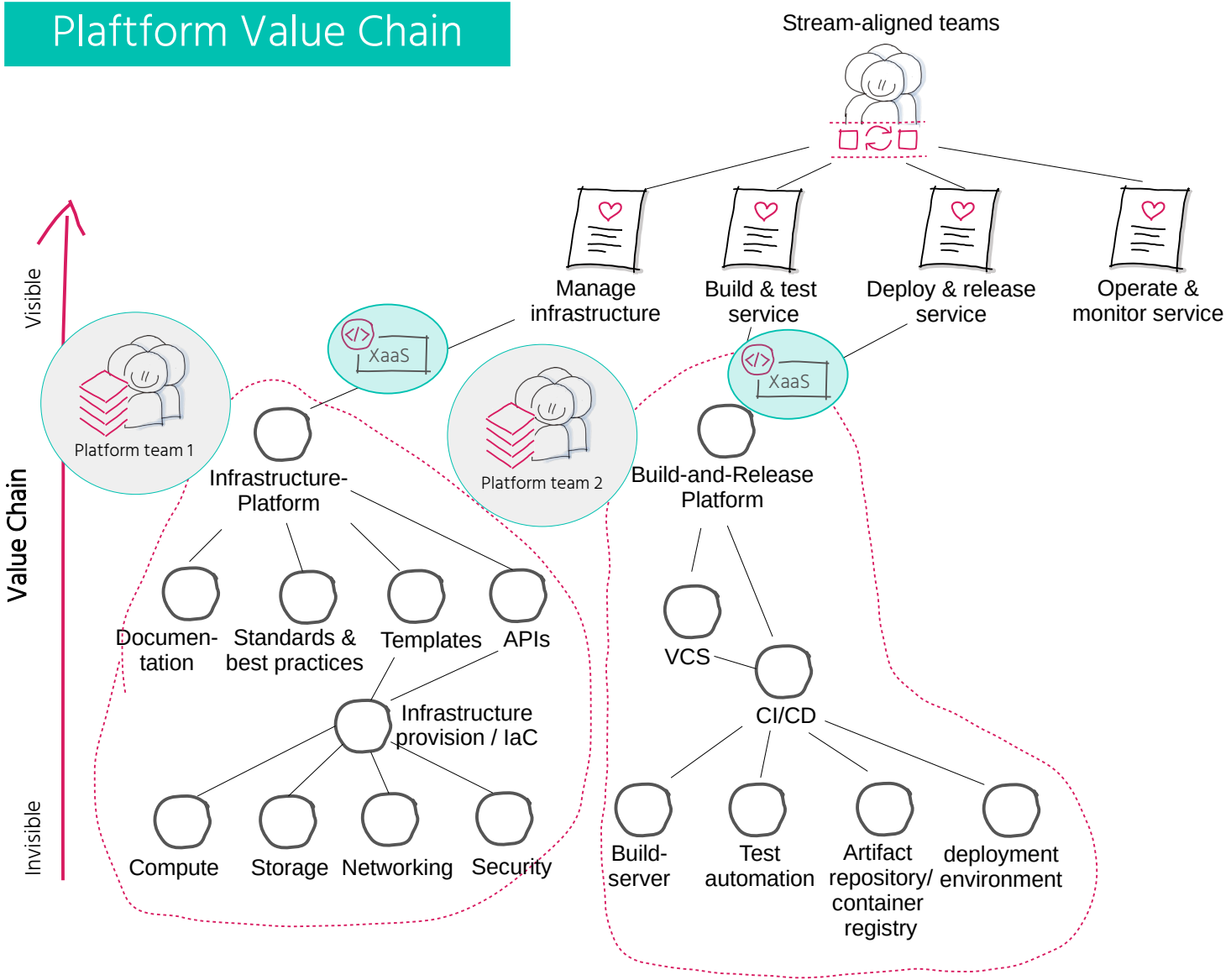


@suksr

Plaftform Value Chain



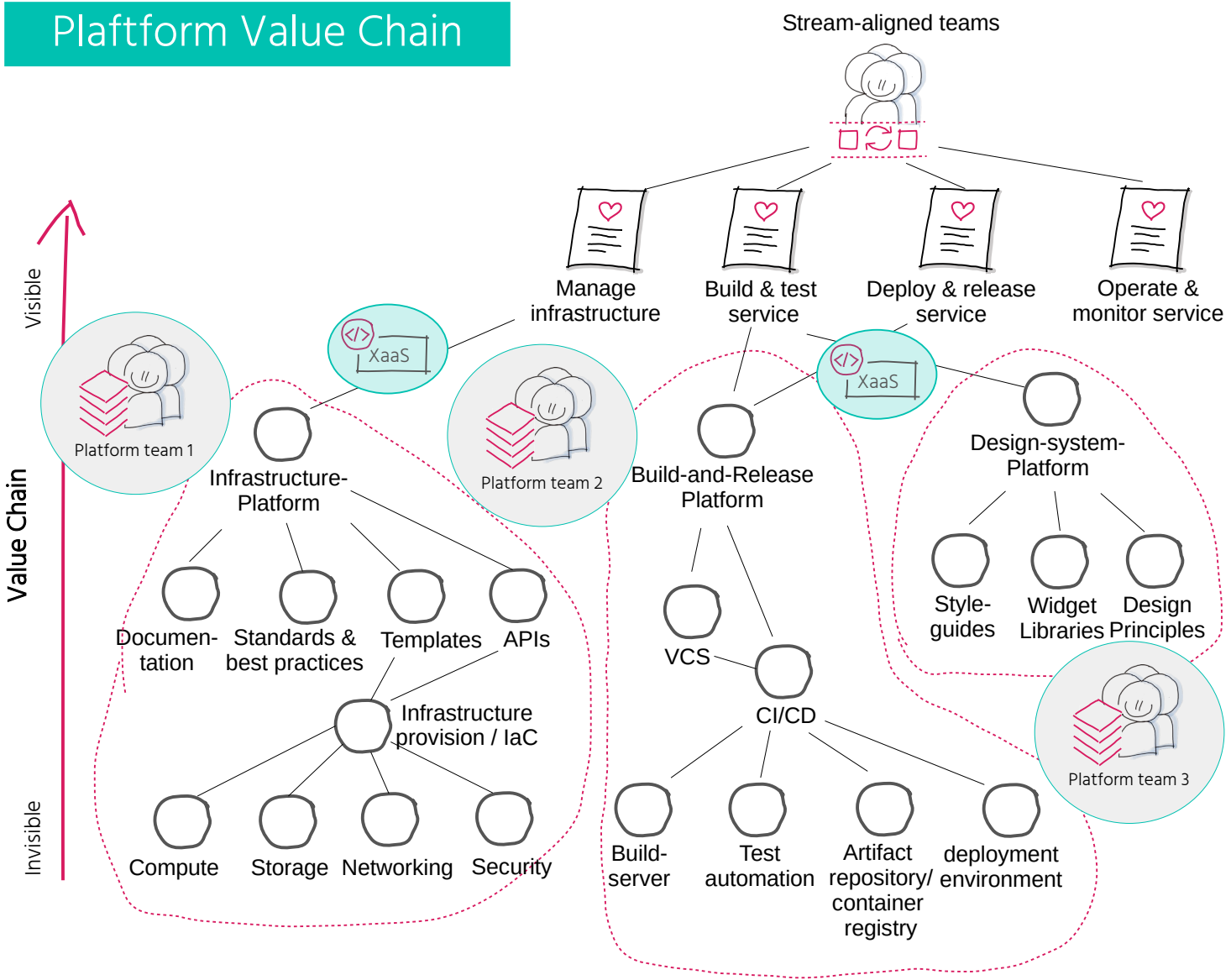
Plaftform Value Chain



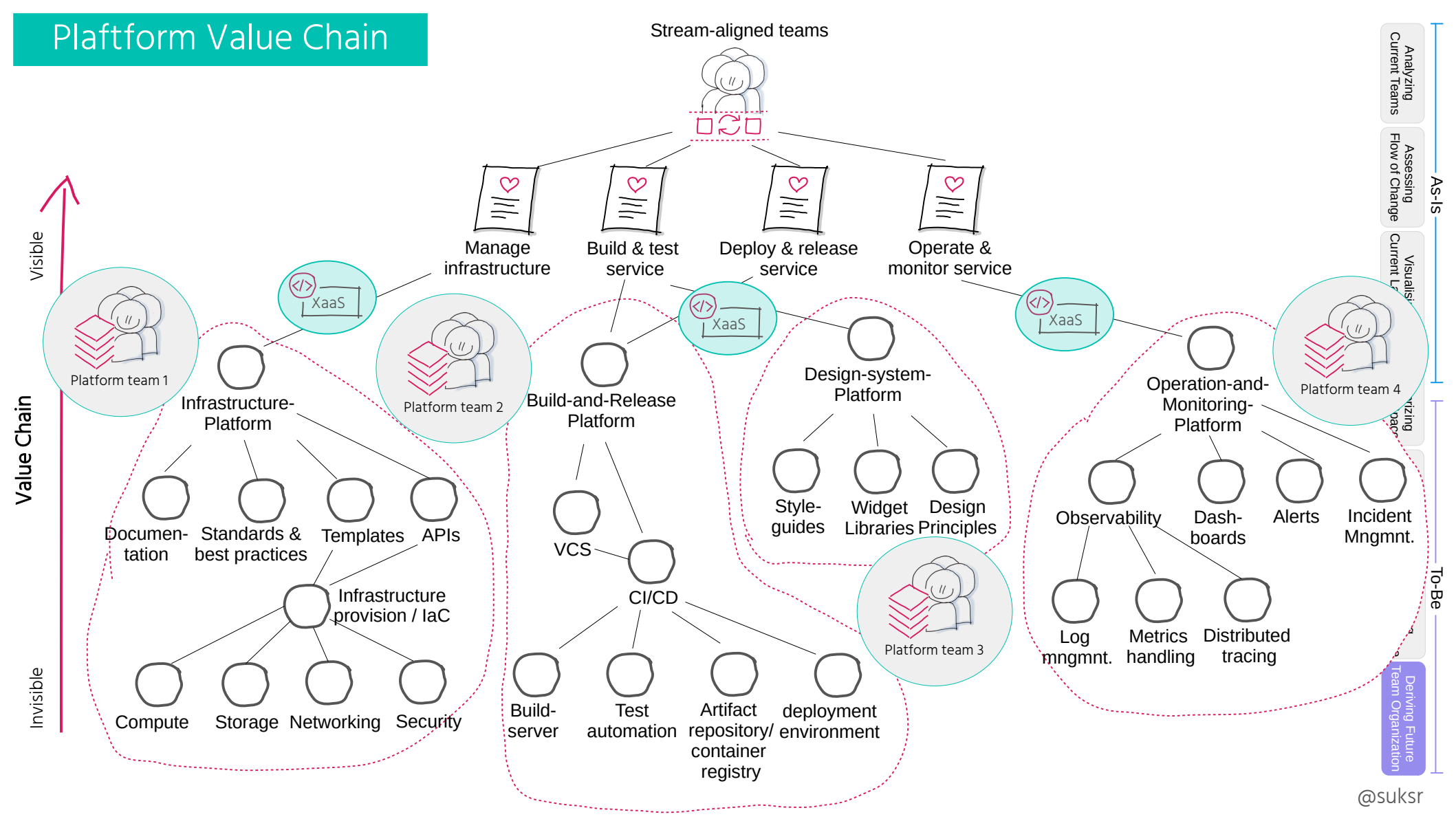
Analyzing Current Teams
Assessing Flow of Change
Visualising Current Landscape
Categorizing Problem Space
Modularizing Solution Space
Visualising Future Landscape
Deriving Future Team Organization
As-Is
To-Be

@suksr

Plaftform Value Chain



Plaftform Value Chain



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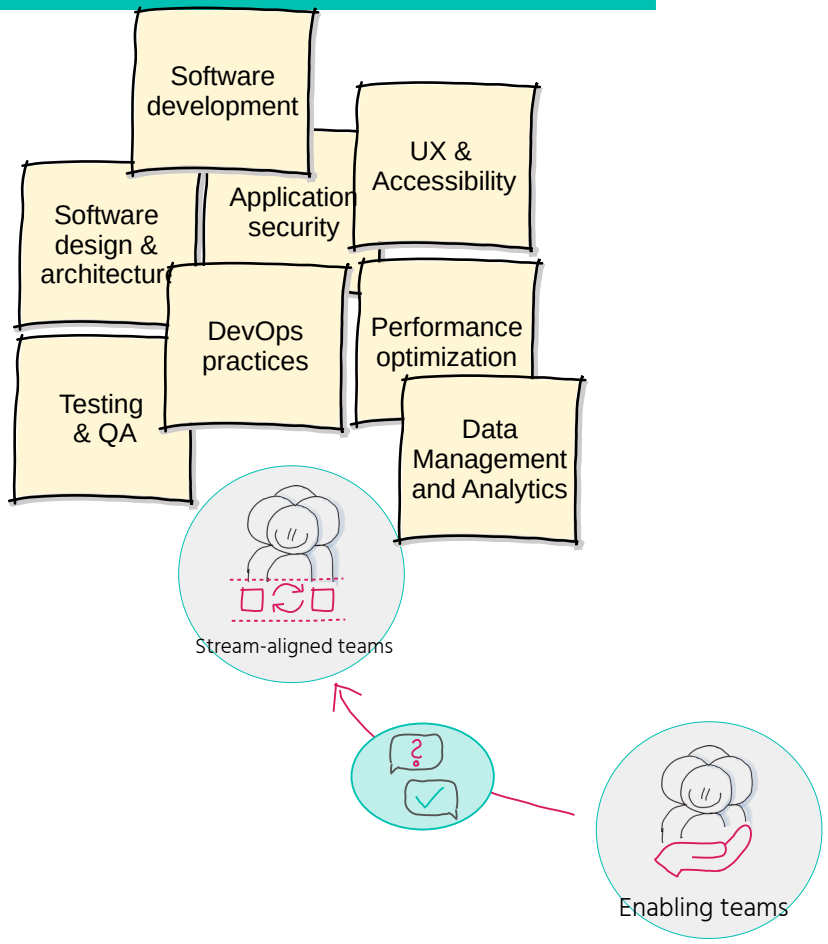
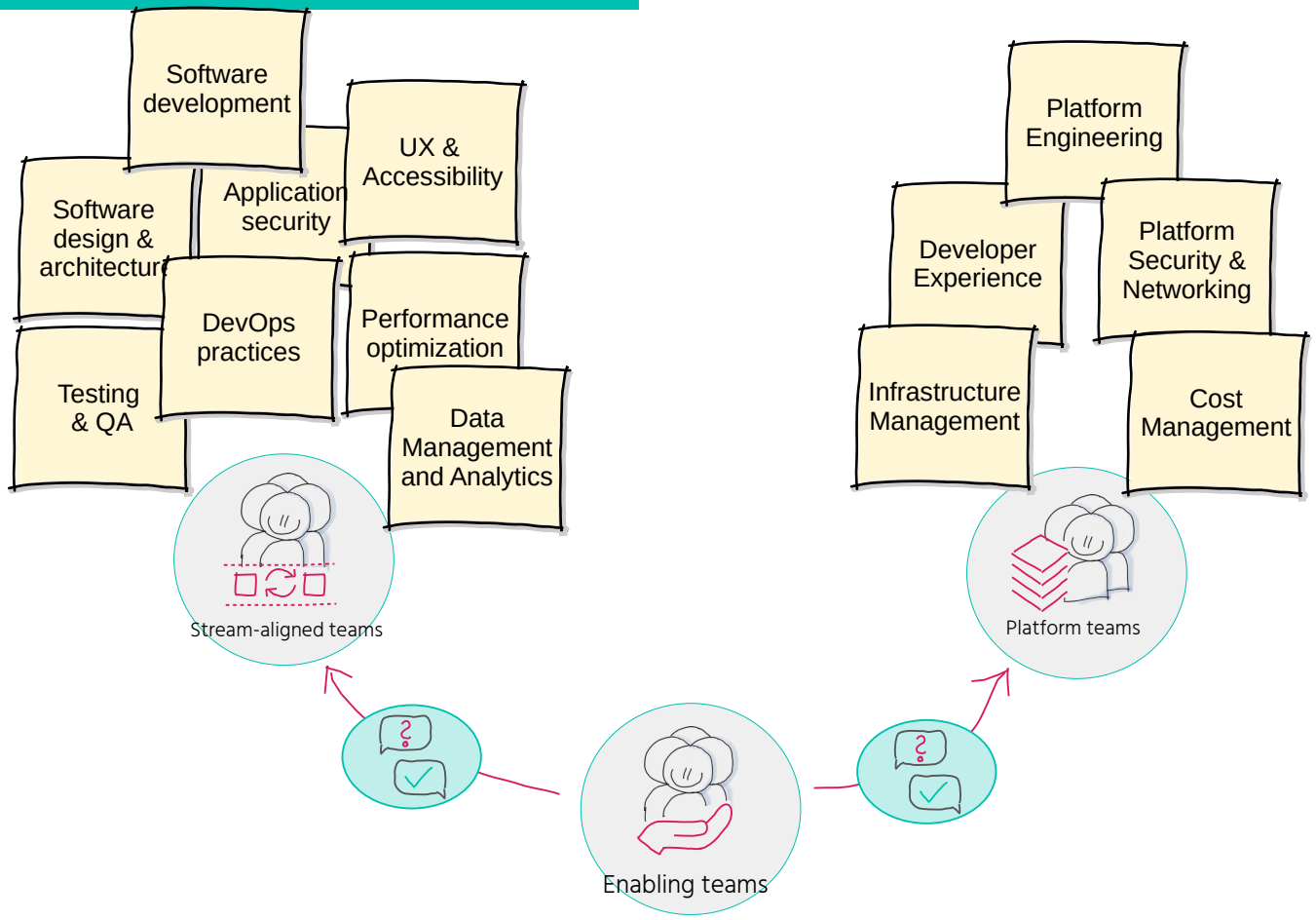
Upskilling Teams on Missing Capabilities



Upskilling Teams on Missing Capabilities



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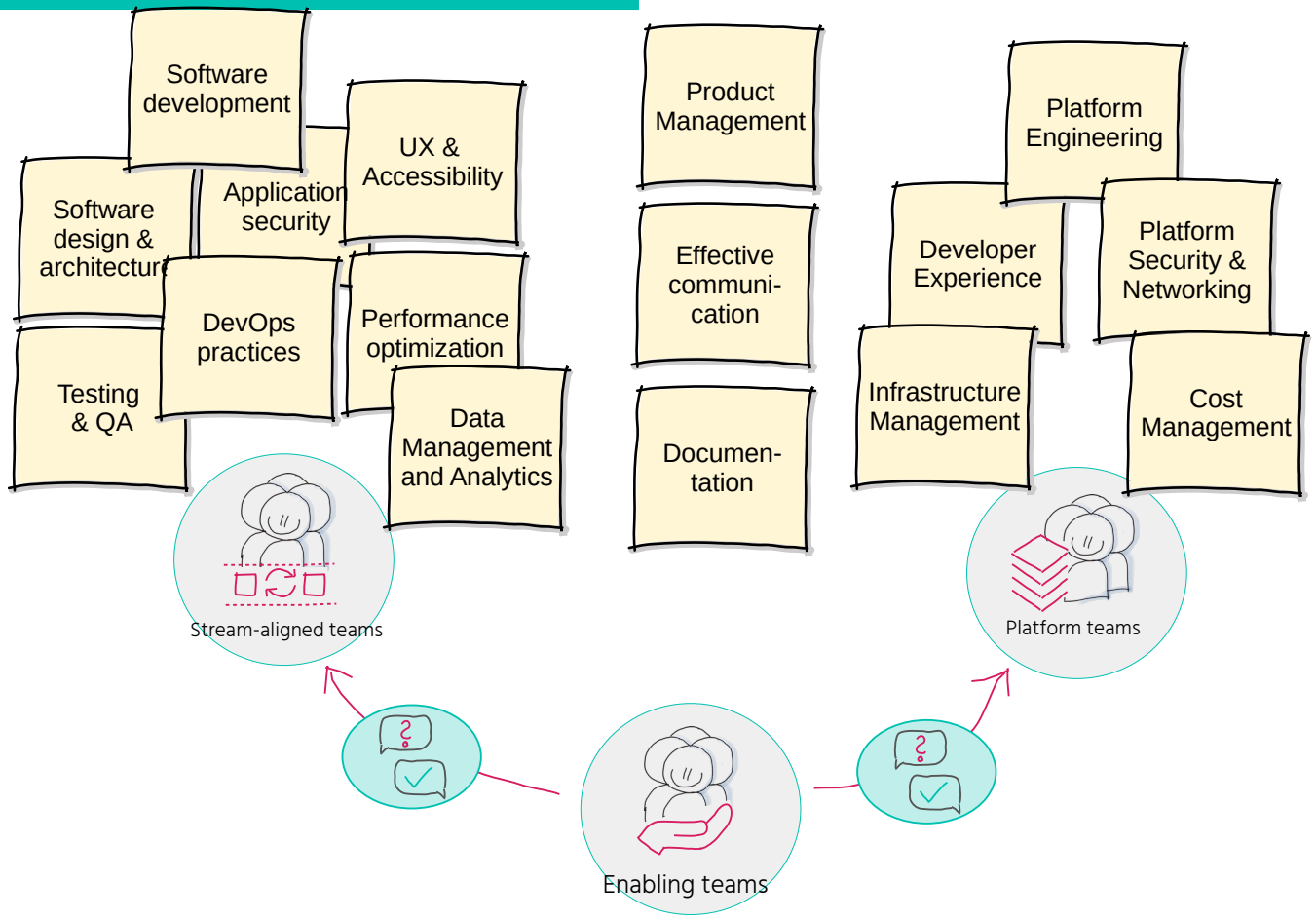
Upskilling Teams on Missing Capabilities



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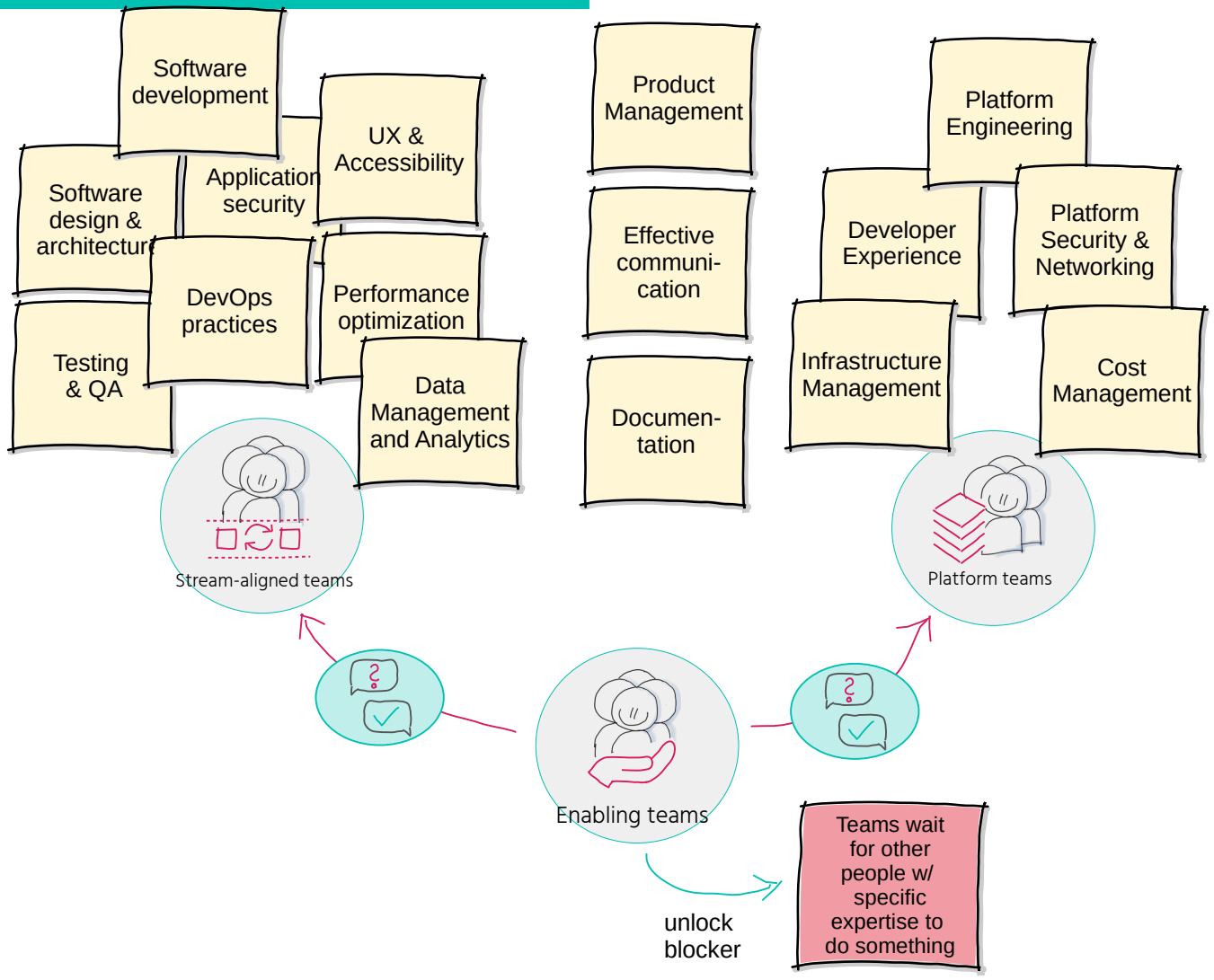
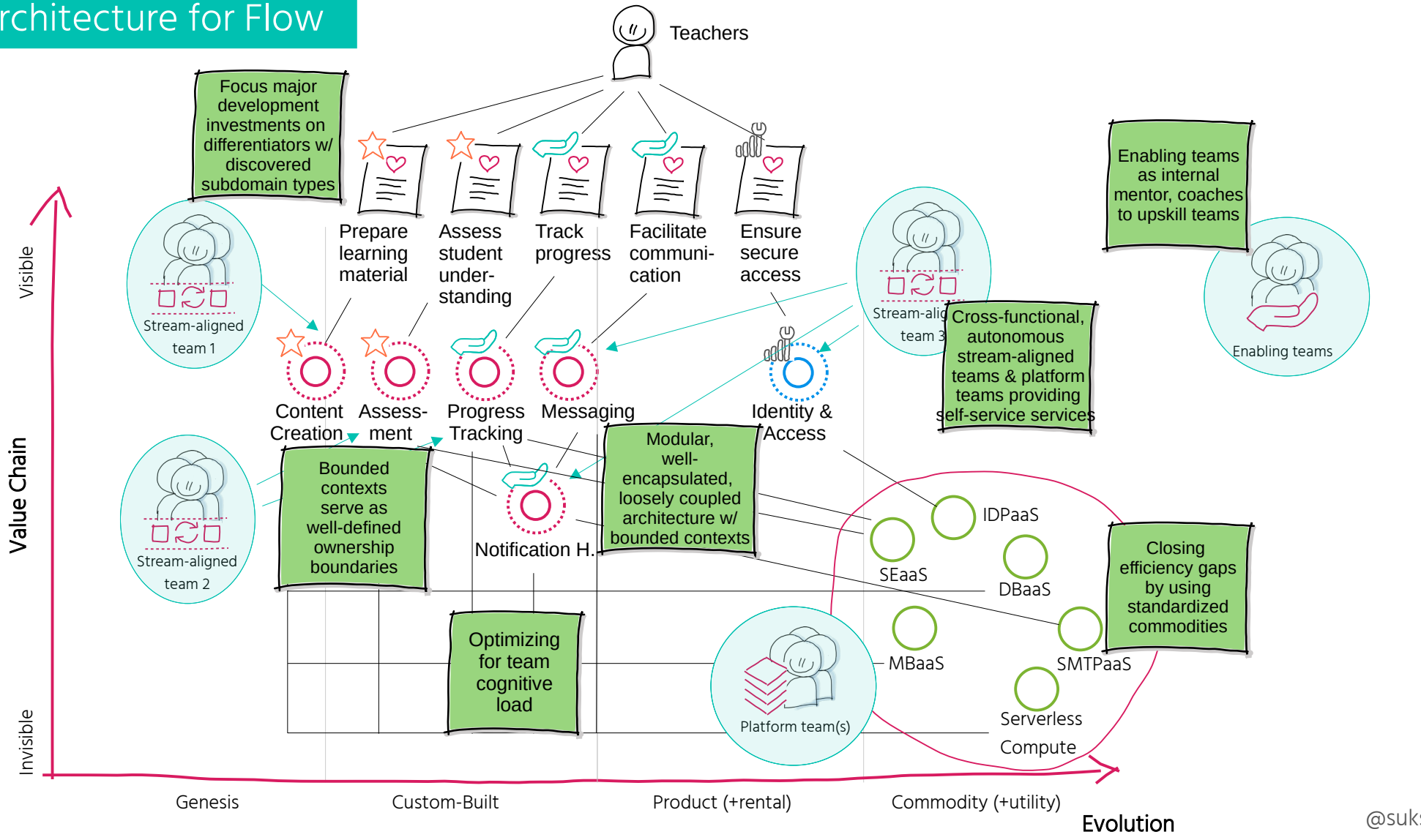
Upskilling Teams on Missing Capabilities



Architecture for Flow



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Architecture for Flow Canvas

START

AS-IS

1

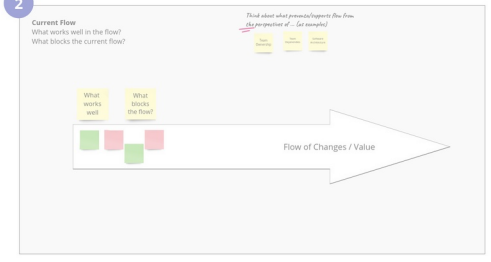
Current Teams & Ways of Working

What are the current teams (structure)?
What parts/modules of the system do they own?
What are their team sizes?
What are the current team dependencies?
What are the current team interaction modes (PR, inner source, weekly/monthly cross-team meetings, etc)?
What are their current practices? (e.g. kanban, scrum, planning techniques, etc.)

2

Current Flow

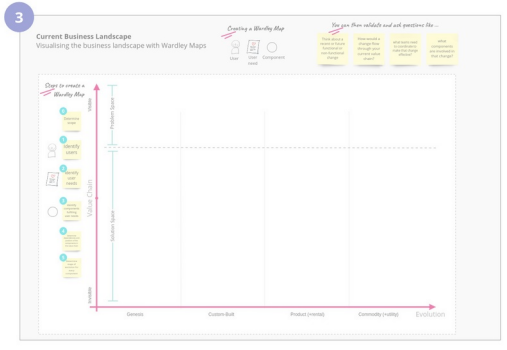
What works well in the flow?
What blocks the current flow?



3

Current Business Landscape

Visualising the business landscape with Wardley Maps



INSPIRATION

TO-BE

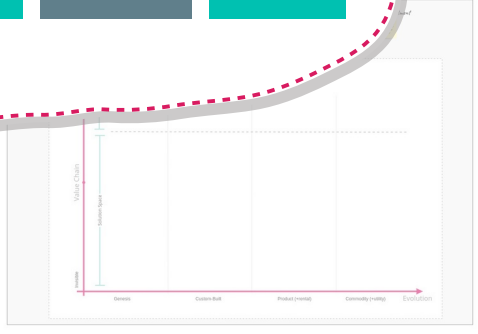
4

Building the right thing right

5

Modularity in the Solution Space

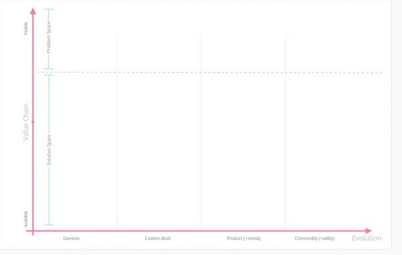
Decomposing solution space into bounded contexts (design decisions)



7

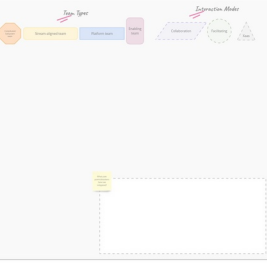
Future Team Ownership Boundaries

Identifying future team ownership boundaries

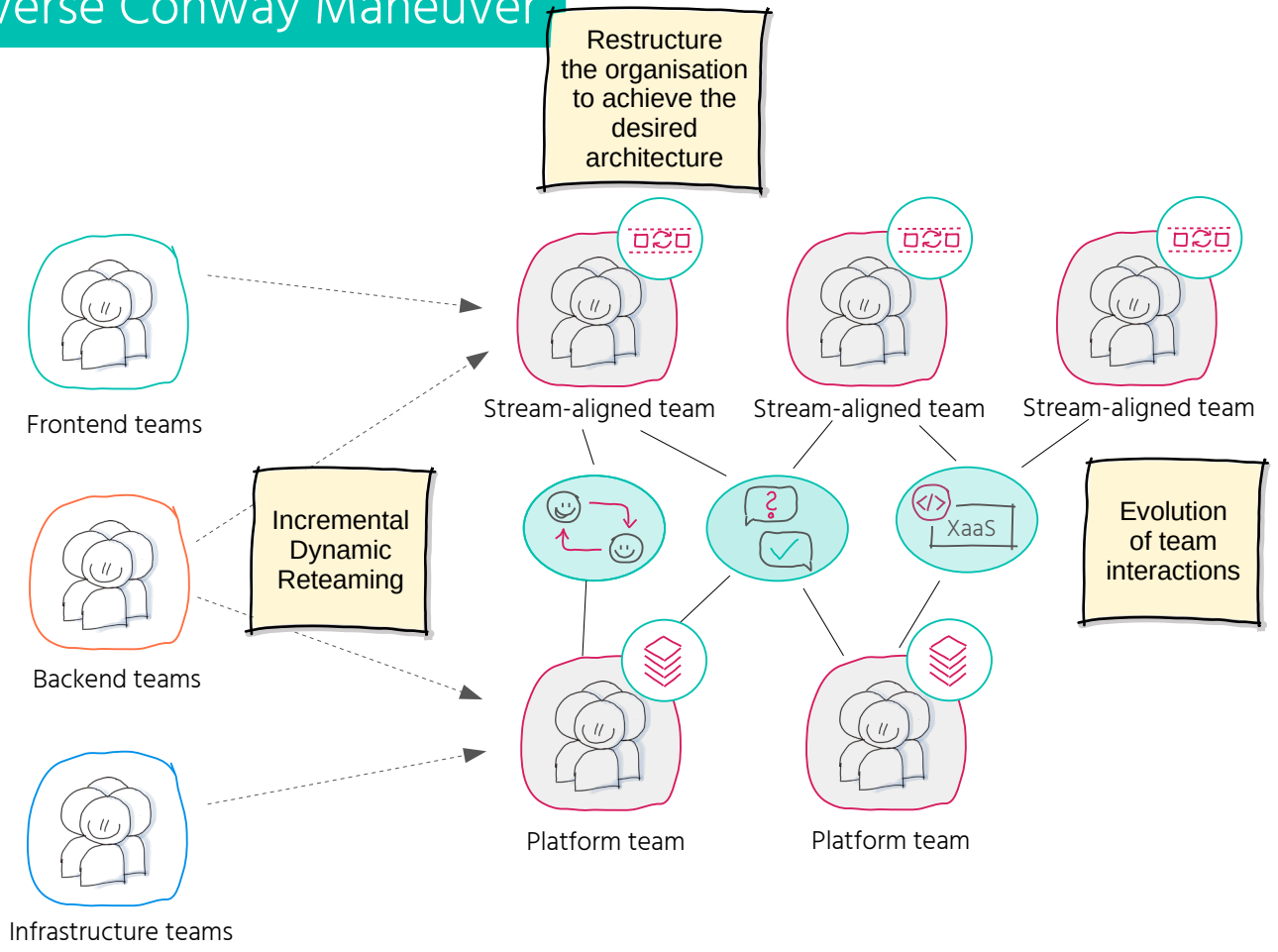


8

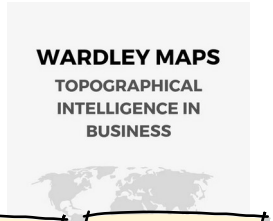
Future Team Constellation & Interaction Modes

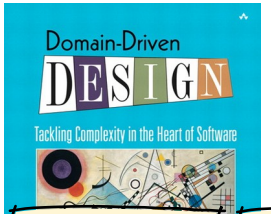


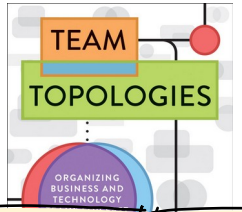
Next Steps: Reverse Conway Maneuver



Summary







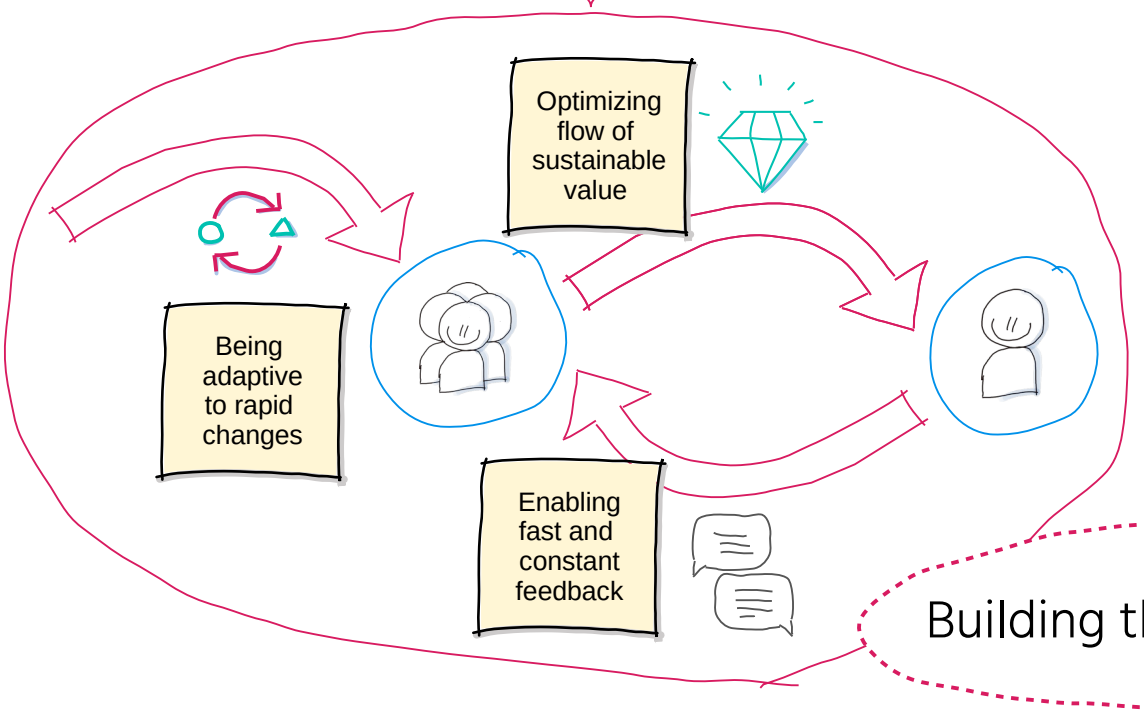
Generate value aligned to user needs

Unlock blockers to flow

Focus major development investments on differentiators

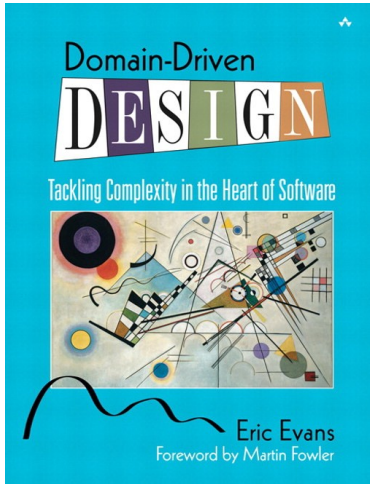
Close potential efficiency gaps

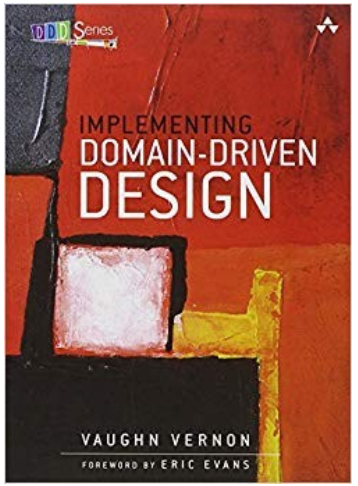
Align teams & evolve team interaction to system & strategy

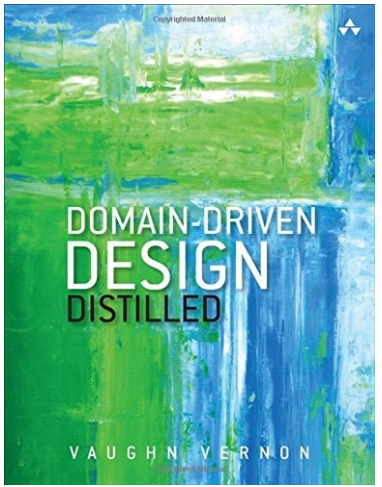


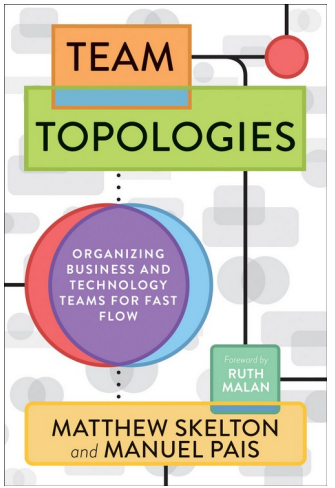
Building the right thing right

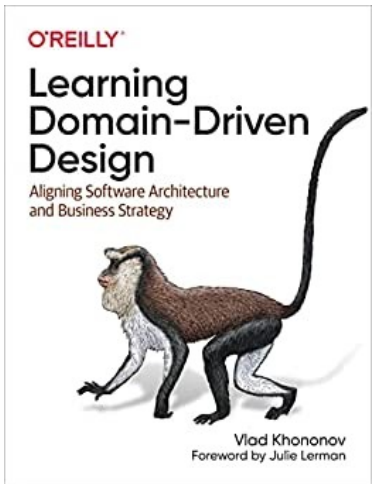
Some References

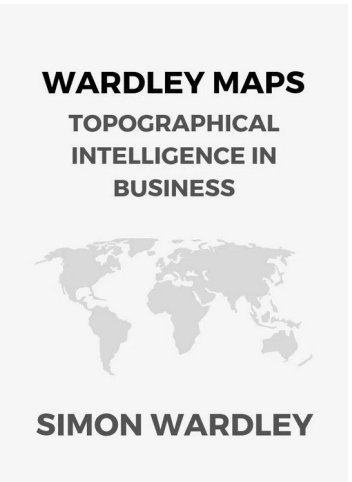


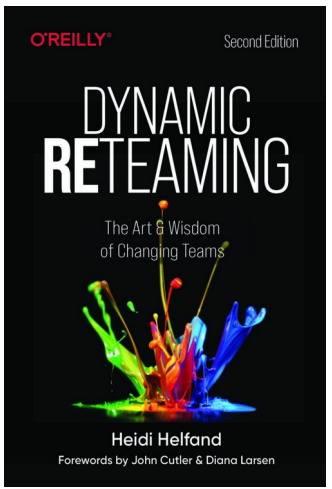












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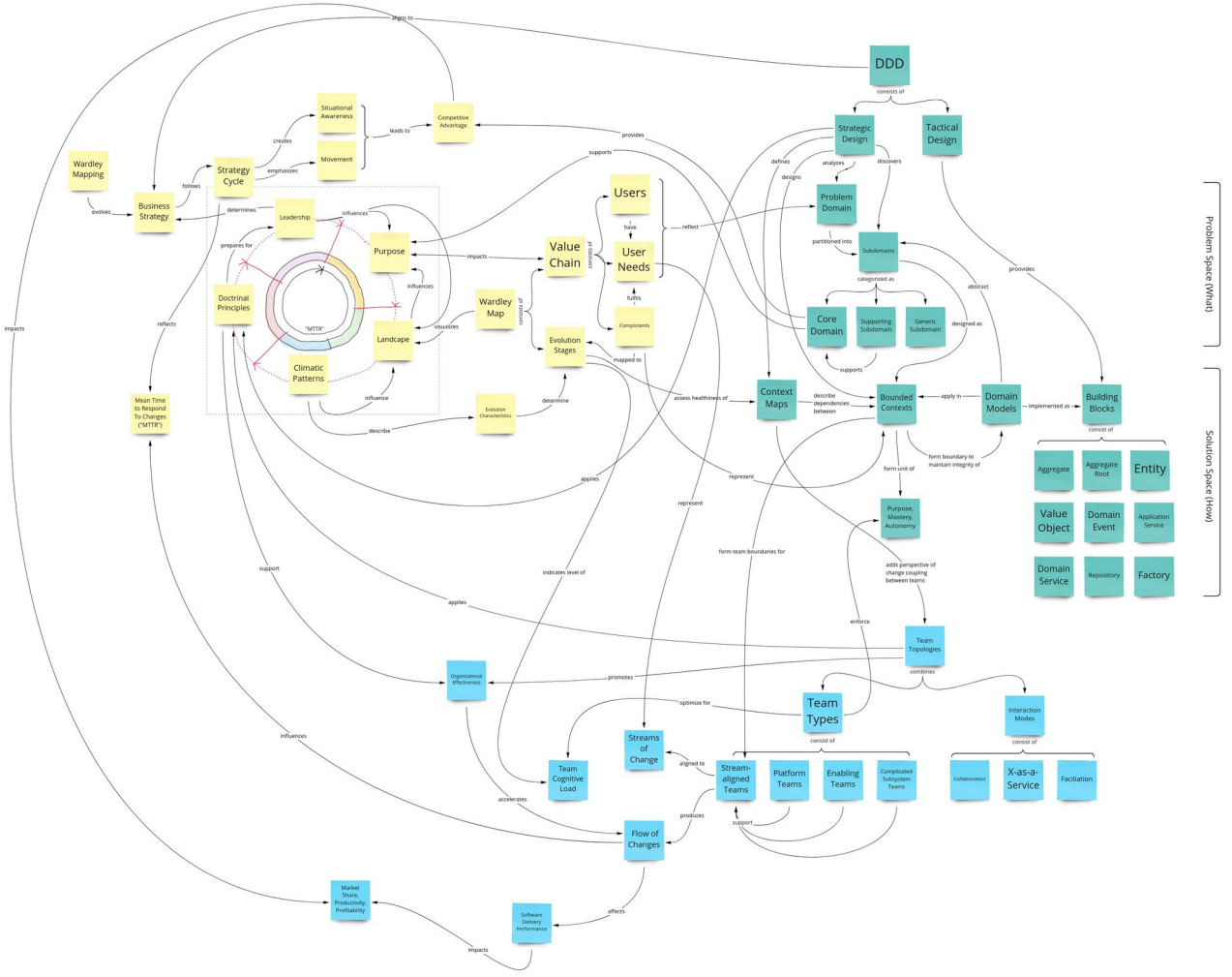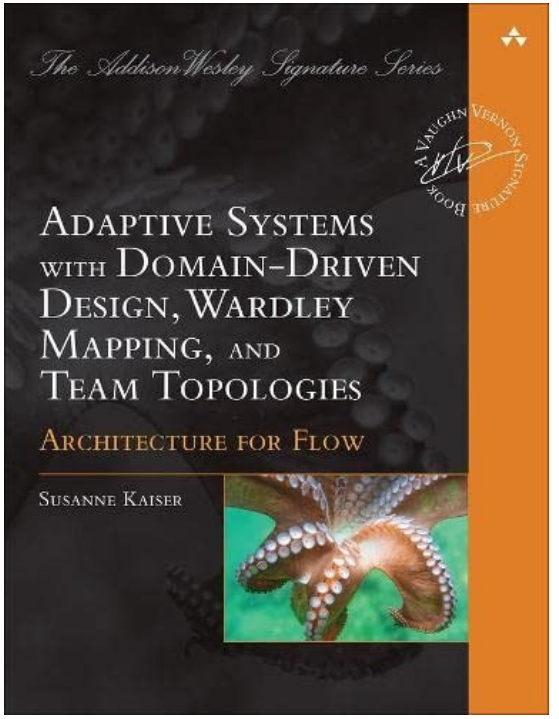
If you are interested in more details ...