

Evolving a Legacy System w/ Architecture for Flow

Susanne Kaiser

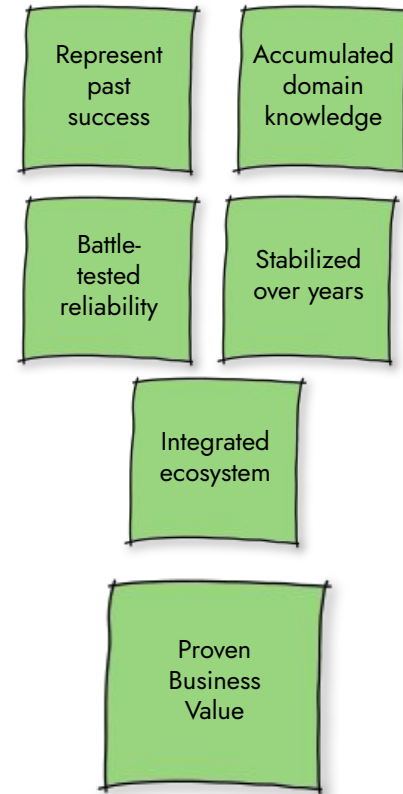
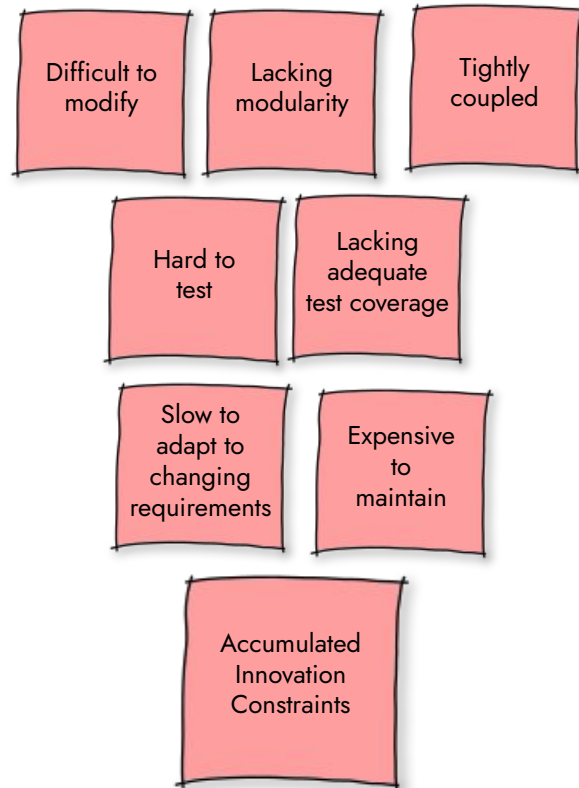
Independent Tech Consultant
Author of "Architecture for Flow"

Does Your Legacy System Spark Joy?




Image source: <https://konmarie.com>

The Paradox of Legacy Systems



How to Handle Legacy Systems?

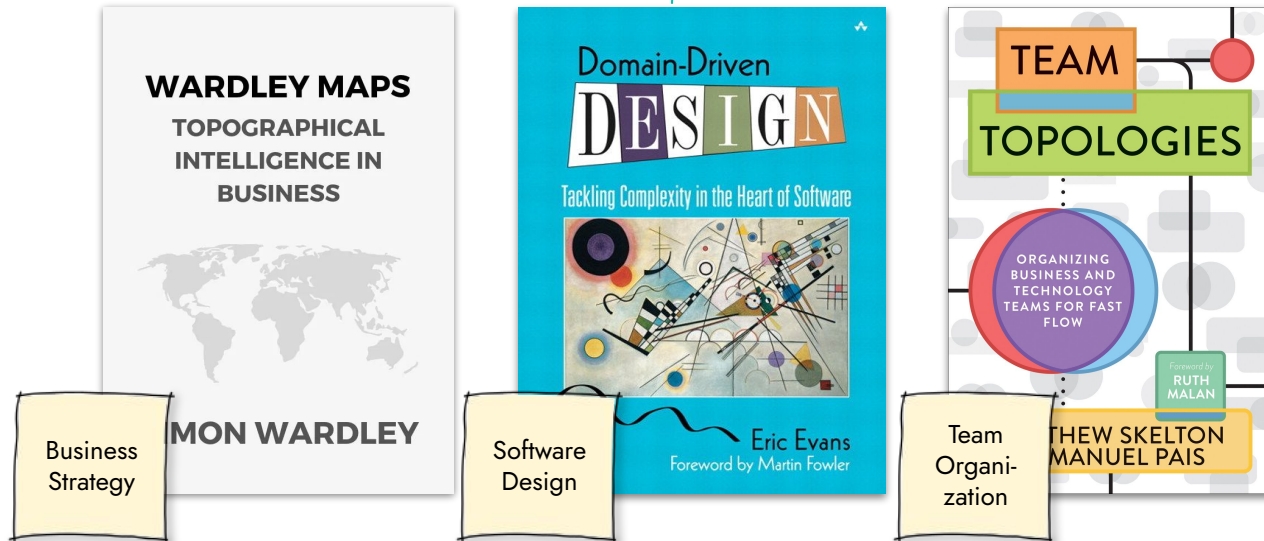
Big-bang replacement is
not just expensive.
It's risky!



Incremental
evolution
instead

Evolving a Legacy System w/ Architecture for Flow

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



Architecture for Flow Canvas



1

Current Status & Ways of Working

What are the current issues (Pain Points)?
What parts/sections of the system do they impact?
What are their main causes?
What are the current main dependencies?
What are the current main interaction models (PM, team structure, meeting frequency, cross-team meetings, etc.)?
What are their current products? (e.g., features, services, planning techniques, etc.)

2

Current Flow

What events add to the flow?
What breaks the current flow?

Identify relevant elements for flow

What is the flow? (e.g., process)



Flow of Changes / Value

3

Current Business Landscape

Visualizing the business landscape with Viability Maps

Identify viability map

Identify viability map

Identify viability map



5

Viability to the Solution Space

Decomposing solution space into bounded sections (design decisions)



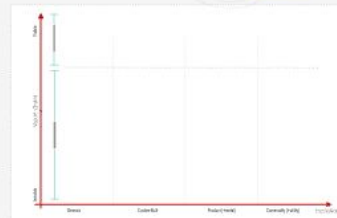
6

Future Business Landscapes & Bounded Controls

Visualizing the future business landscape with Viability Maps

Identify the solution space

Identify the solution space



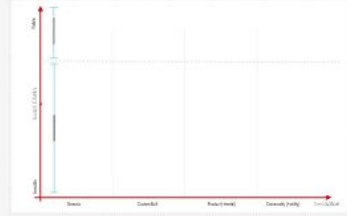
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Future Team Governance Boundaries

Identifying future team assembly boundaries

Identify future team assembly boundaries

Identify future team assembly boundaries



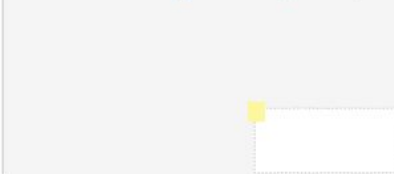
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Future Team Coordination & Interaction Models

Identify future team assembly boundaries

Identify future team assembly boundaries

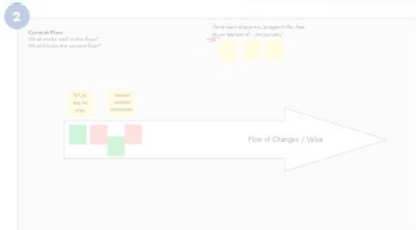
Identify future team assembly boundaries



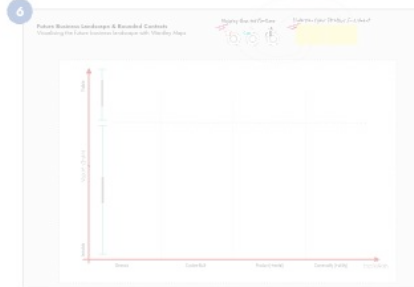
Current Teams & Dependencies



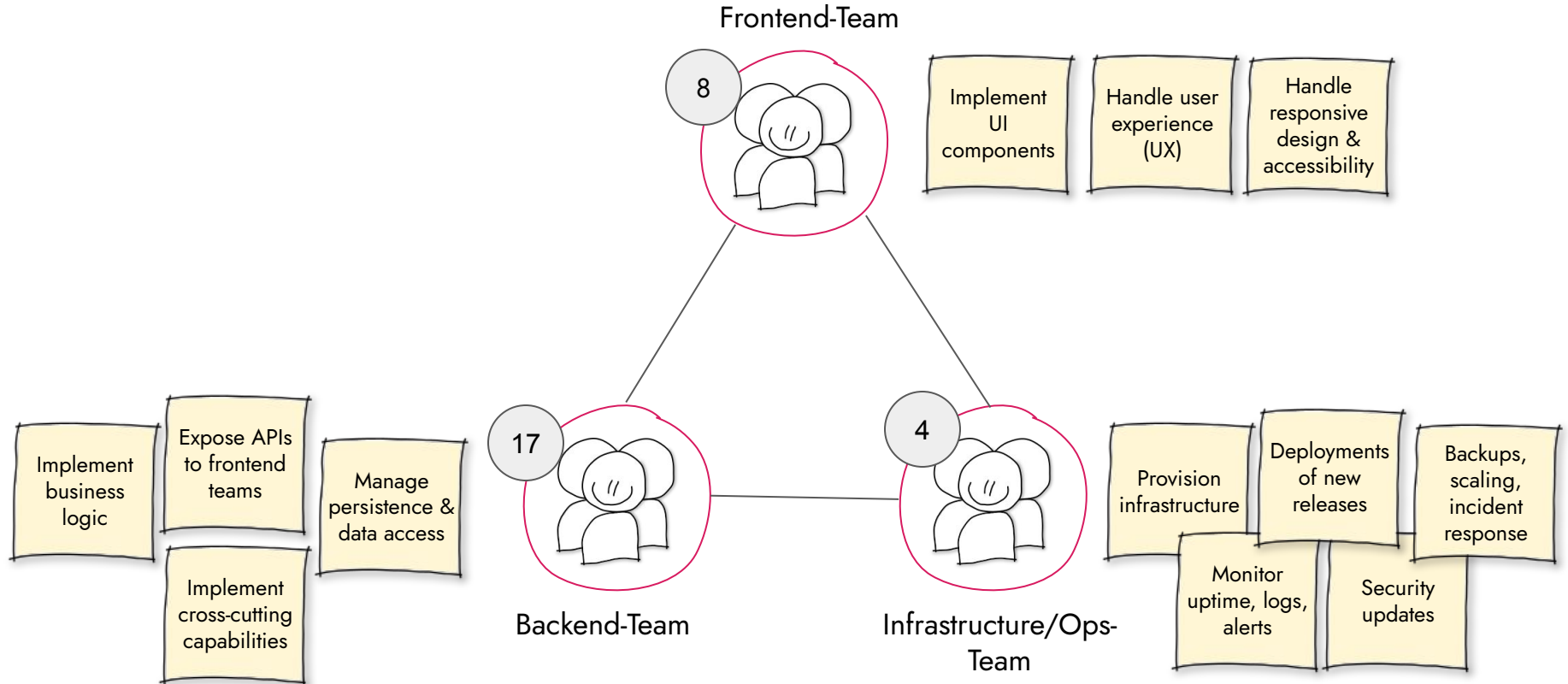
1 Current Teams & Ways of Working
 What are the current teams (if relevant)?
 What parts/functions of the system do they own?
 What are their main goals?
 What are their current team dependencies?
 What are the current team interaction modes? (PM, team events, weekly/biweekly cross-team meetings, etc.)?
 What are their current products? (e.g., features, services, planning techniques, etc.)



5 Modularity in the Solution Space
 Decomposing solution space into bounded solution (change elements)



Current Teams & Dependencies



Assessing Current Flow of Change



1

Current Status & Vision of Working
What are the current issues/problems?
What are the vision of the customer/they want?
What are their business goals?
What are their current state (business model)?
What are the current state (business model) (PE, shared economy, mobility, connectivity, sustainability, etc.)?
What are their current products? (e.g., software, services, platform, technology, etc.)

2

Current Flow
What events add in the flow?
What breaks the current flow?

Next state (vision, strategy, etc.)
What is the next state? (the vision)



3

Current Business Landscape
Visualizing the business landscape with the vision map



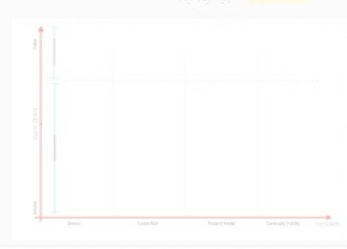
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Modularity in the Solution Space
Decomposing solution space into bounded solution (change elements)



6

Future Business Landscape & Bounded Contexts
Visualizing the future business landscape with the vision map



7

Future State (Vision) & Bounded Contexts
Visualizing the future business landscape with the vision map

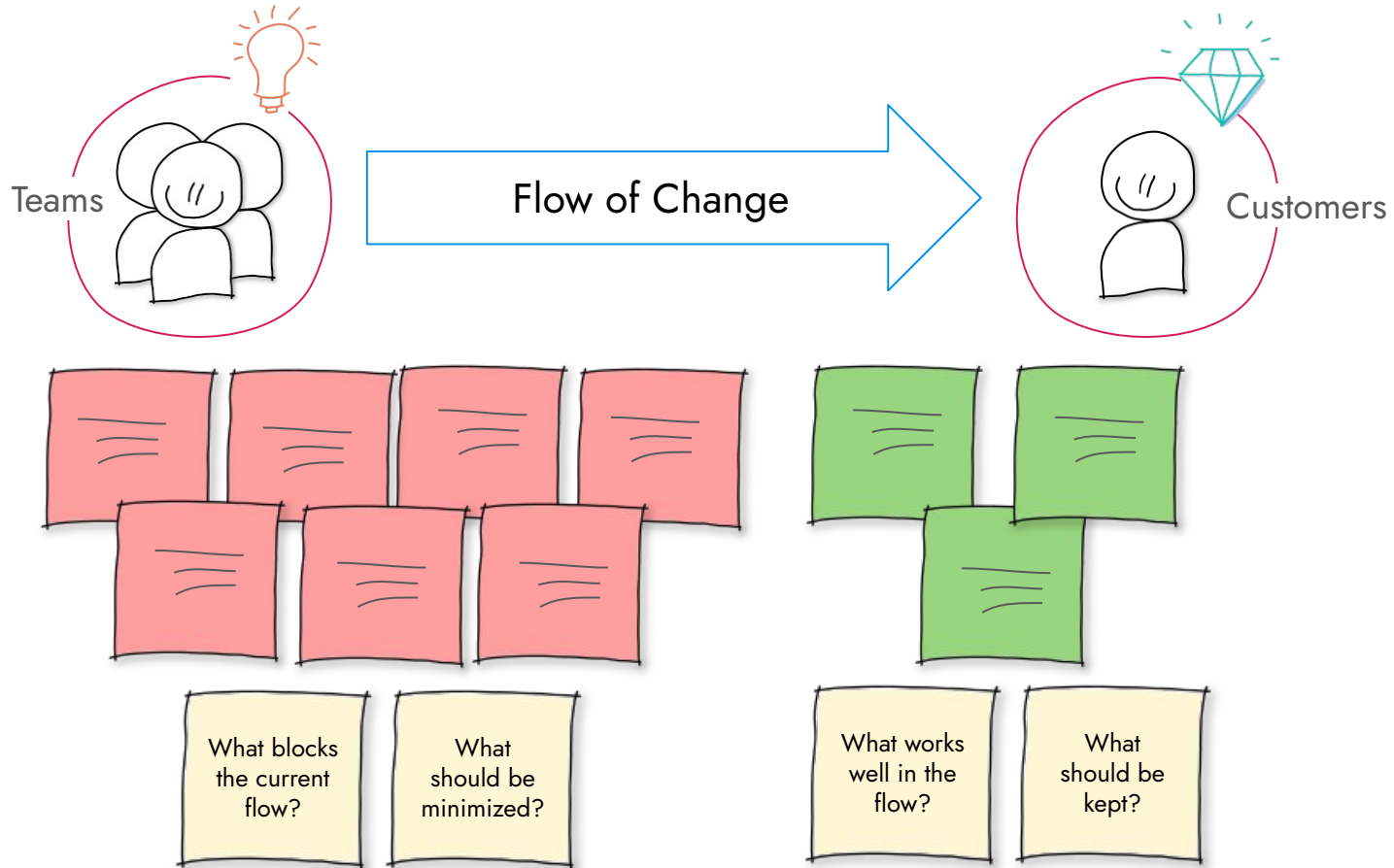


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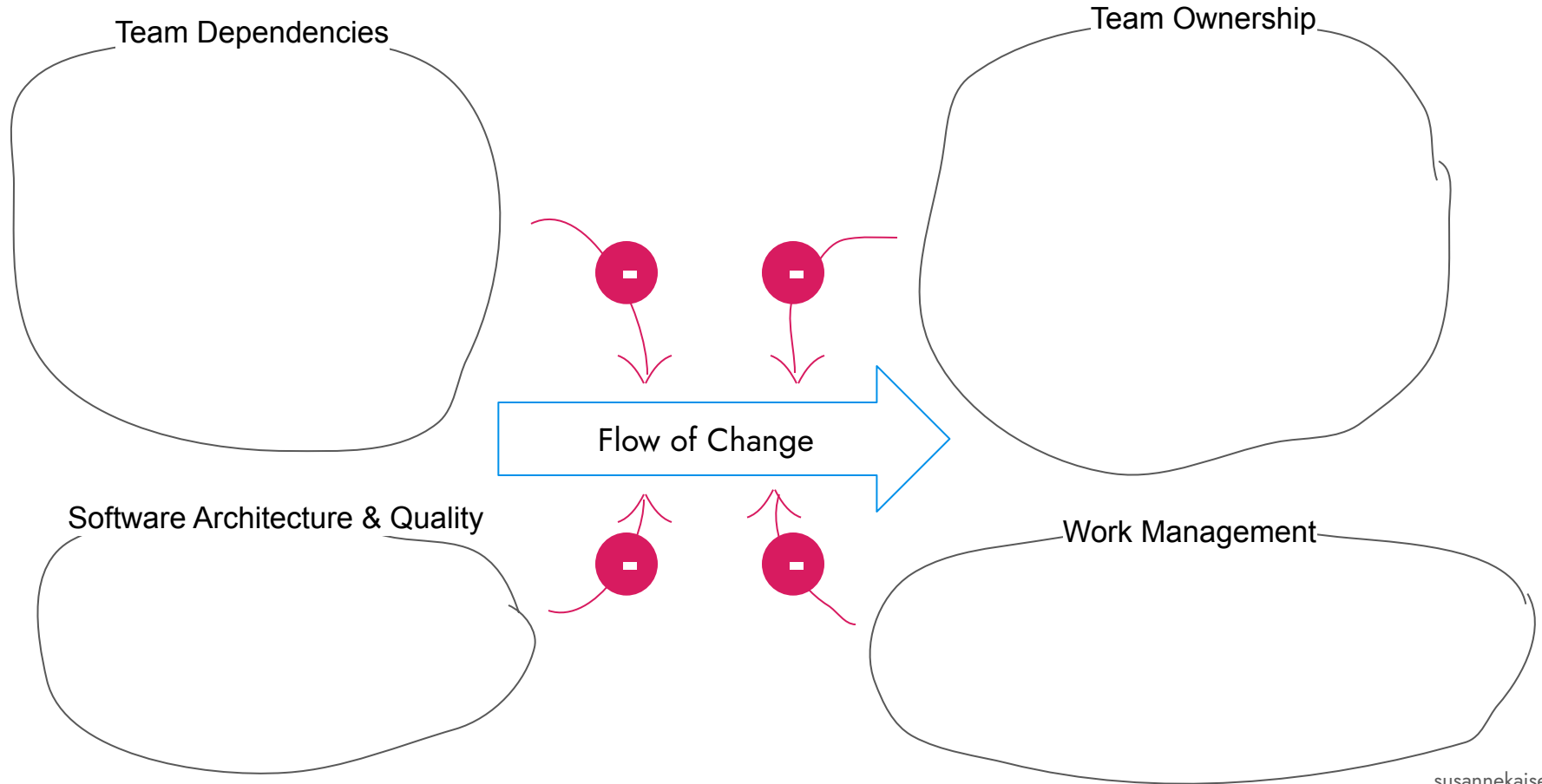
Future State (Vision) & Bounded Contexts
Visualizing the future business landscape with the vision map



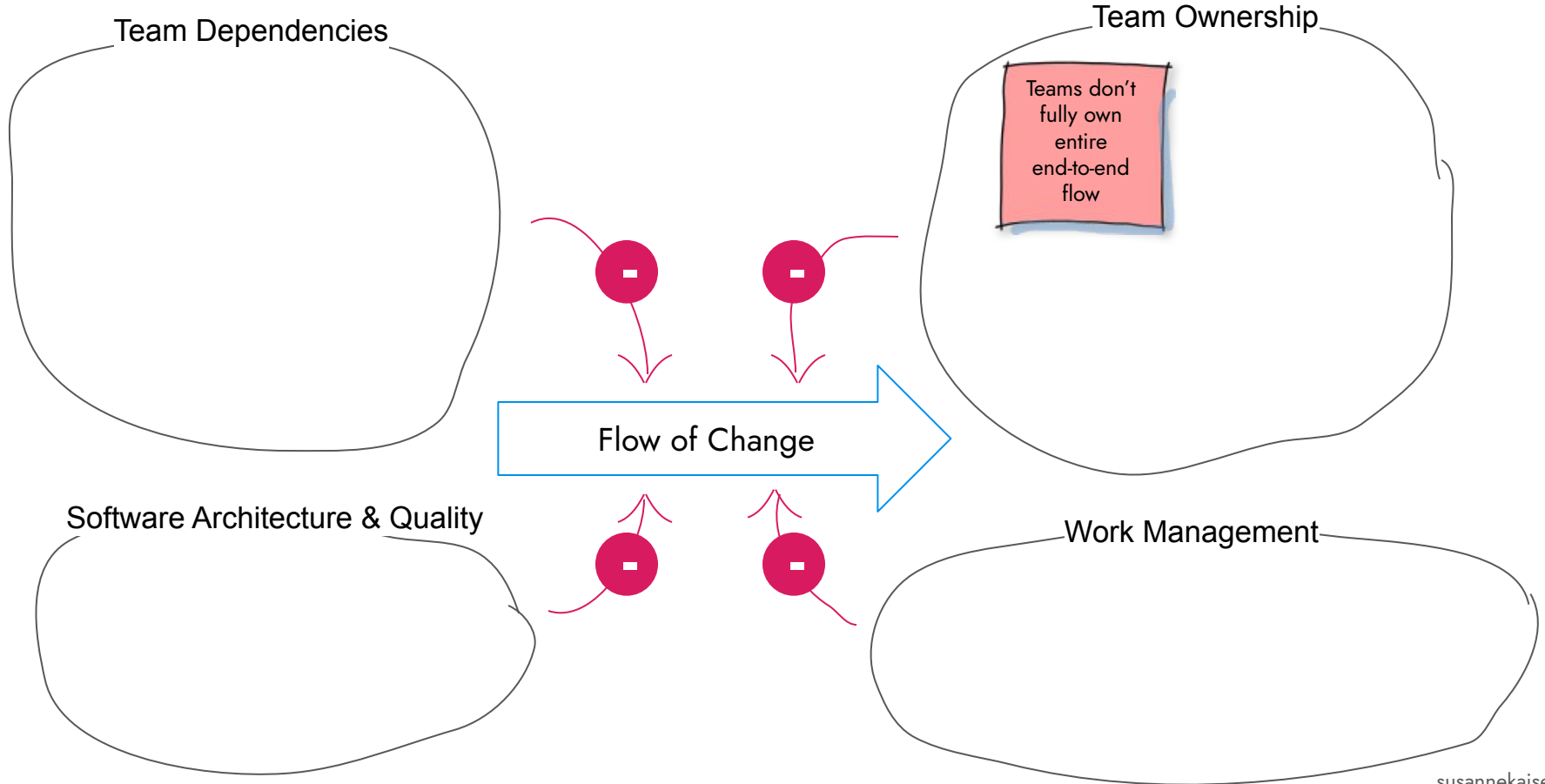
Assessing Current Flow of Change



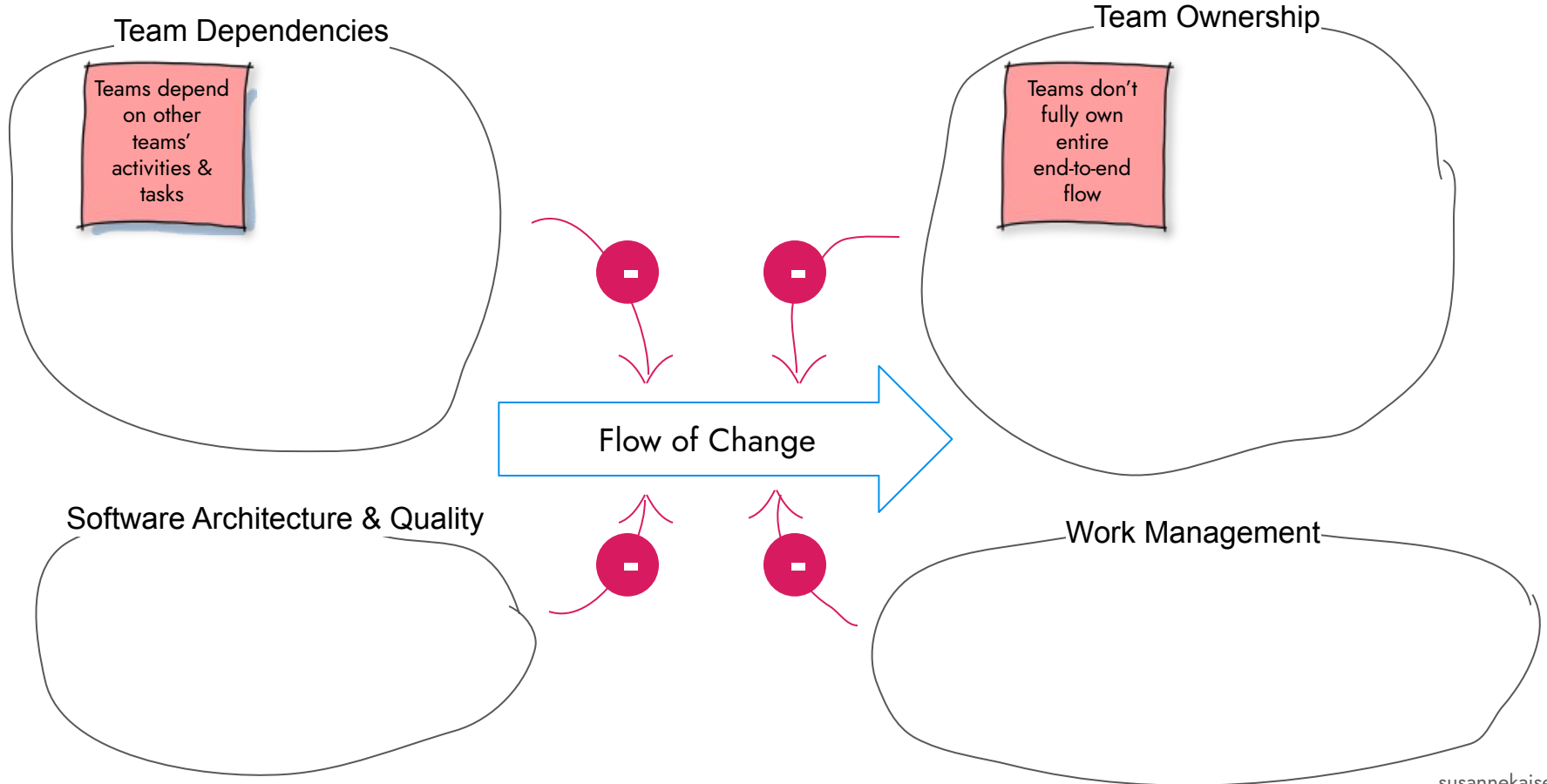
What is Preventing Flow? (Examples)



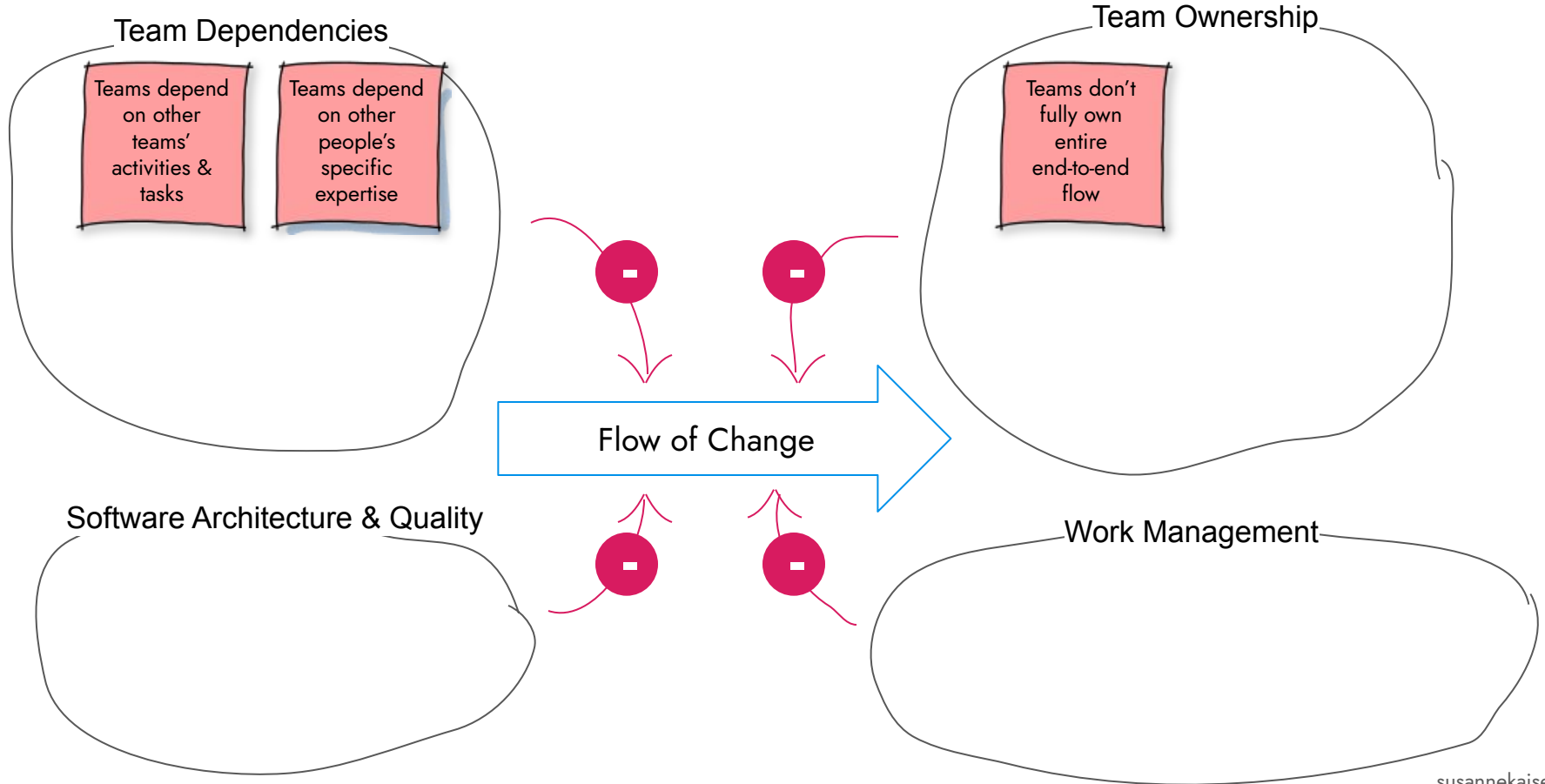
What is Preventing Flow? (Examples)



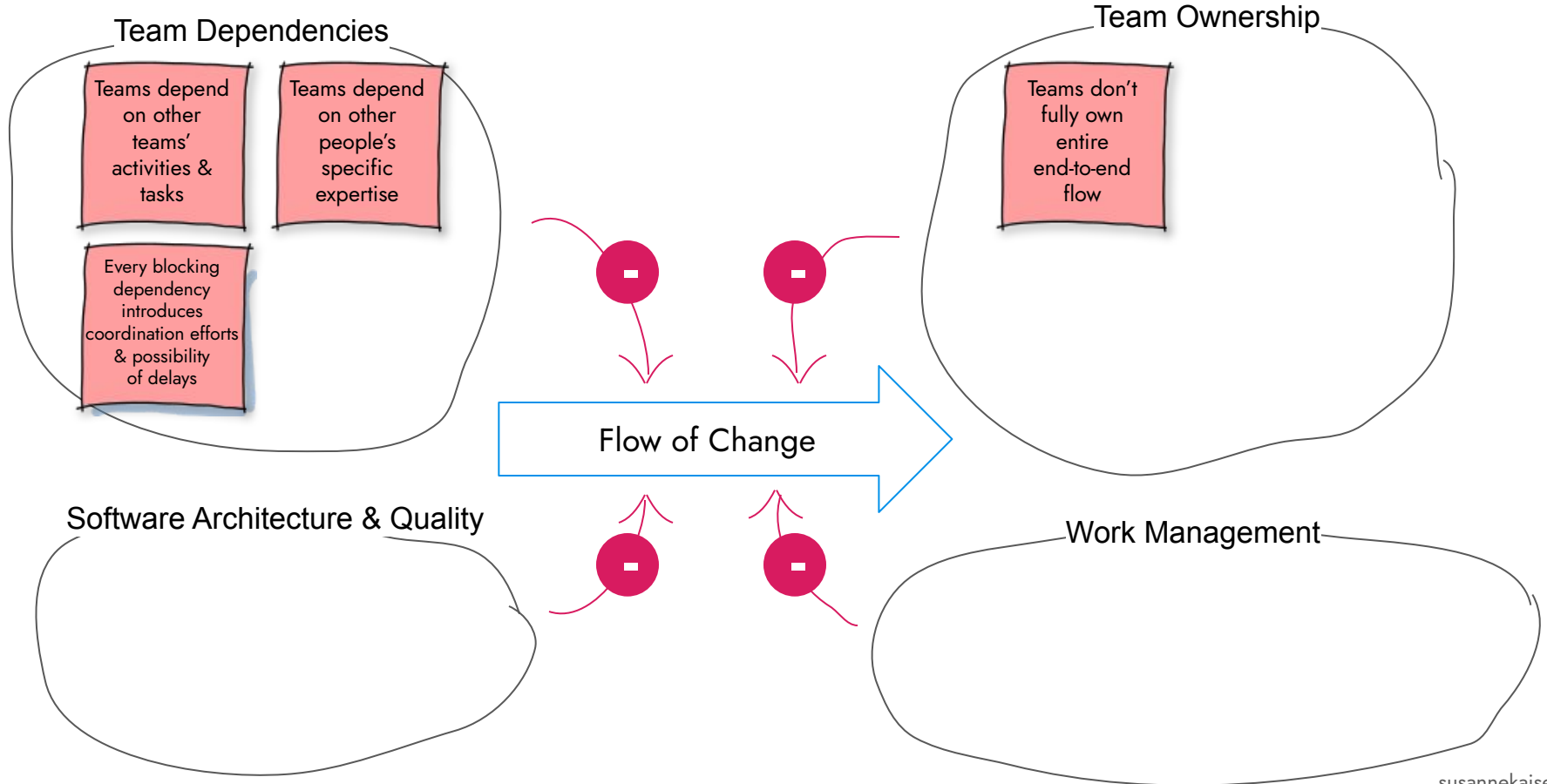
What is Preventing Flow? (Examples)



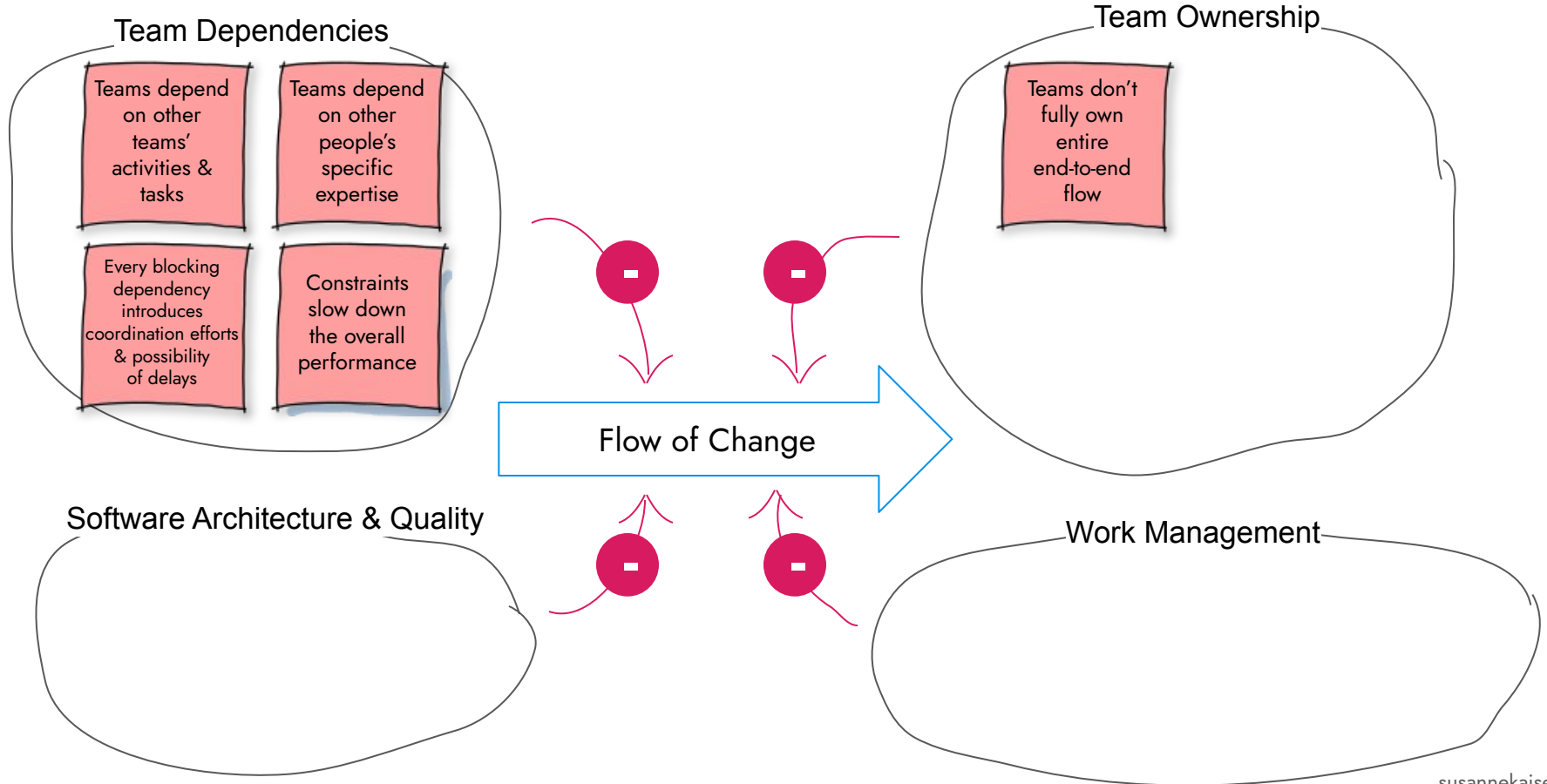
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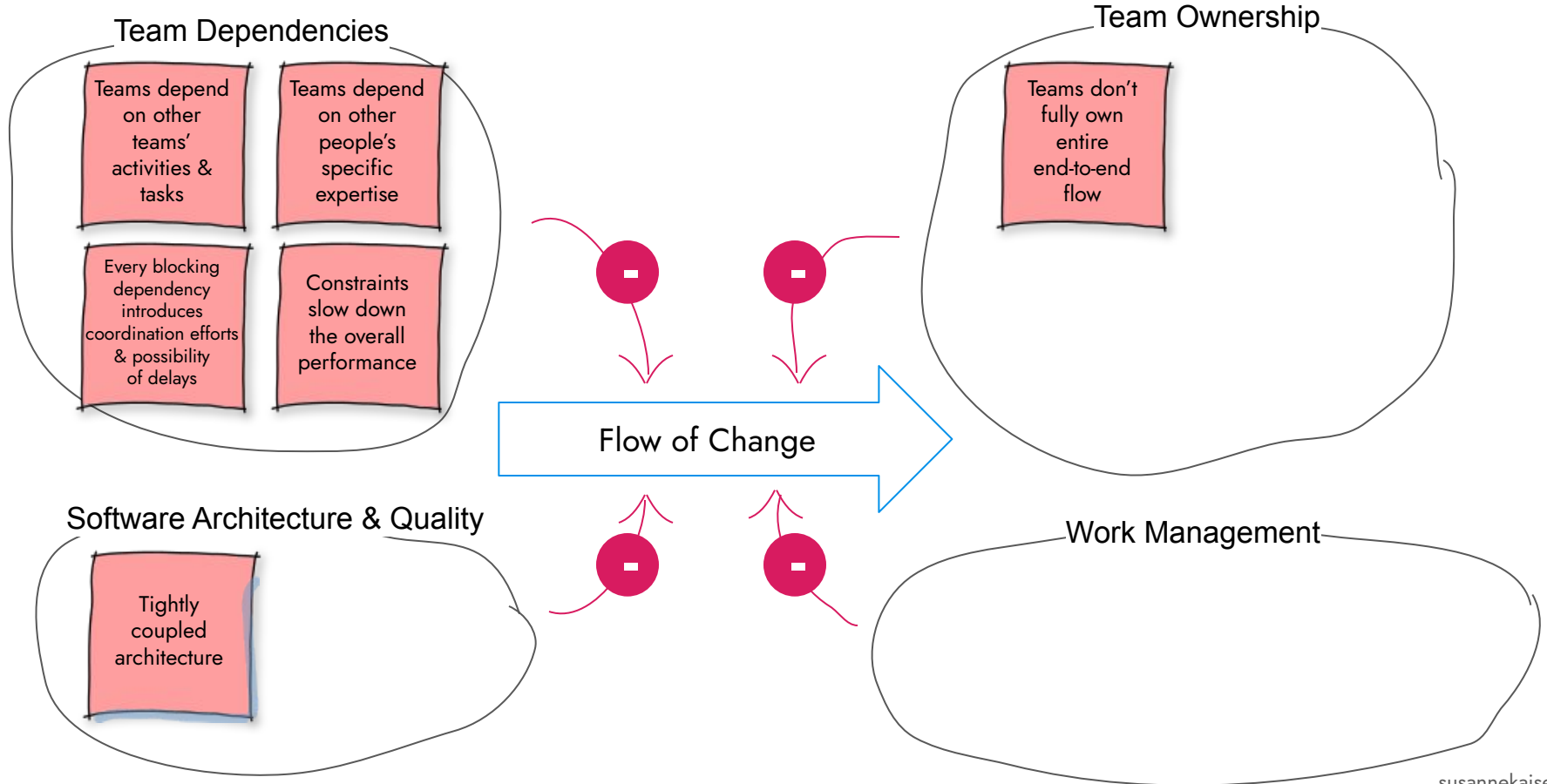
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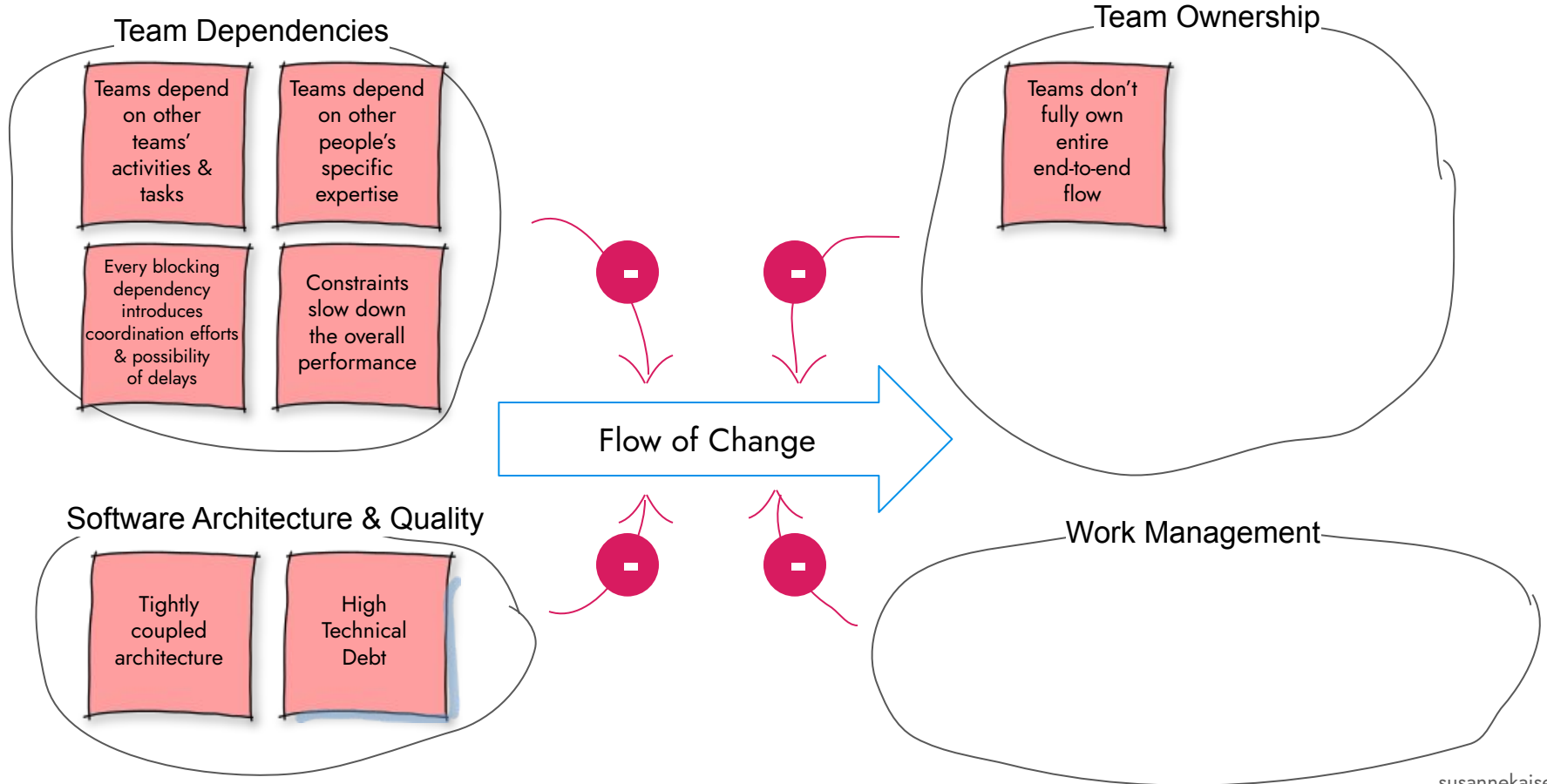
What is Preventing Flow? (Examples)



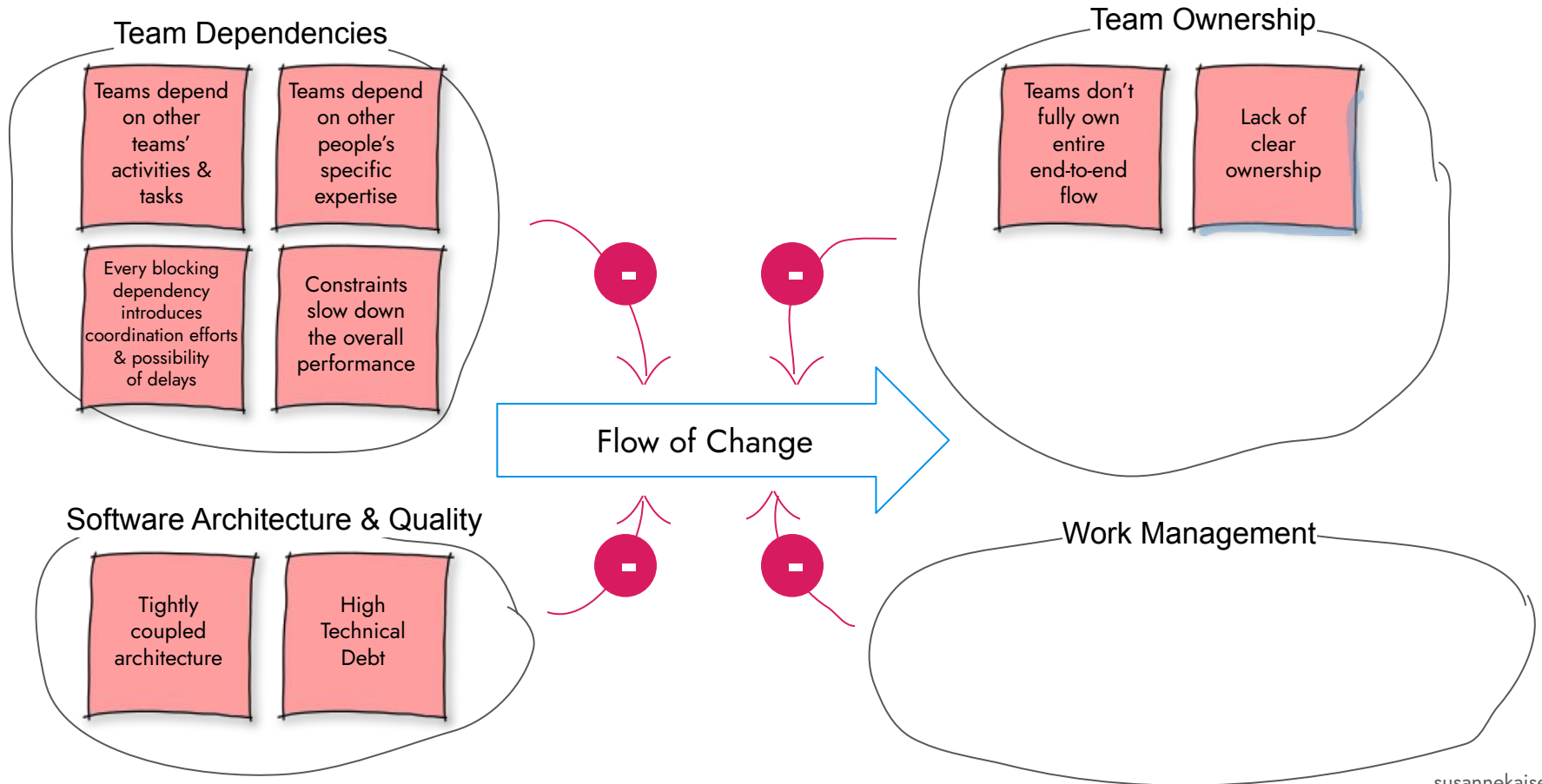
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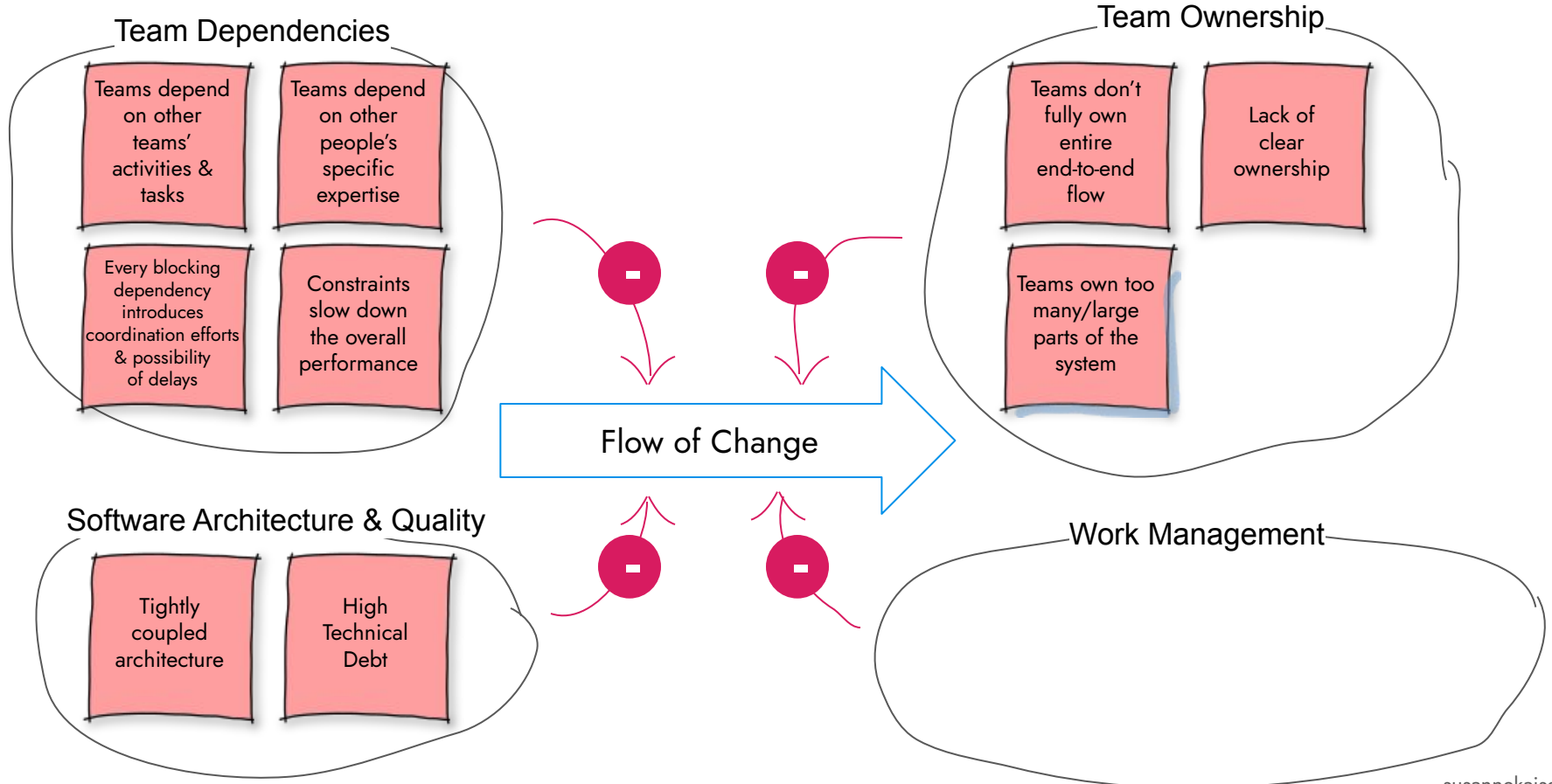
What is Preventing Flow? (Examples)



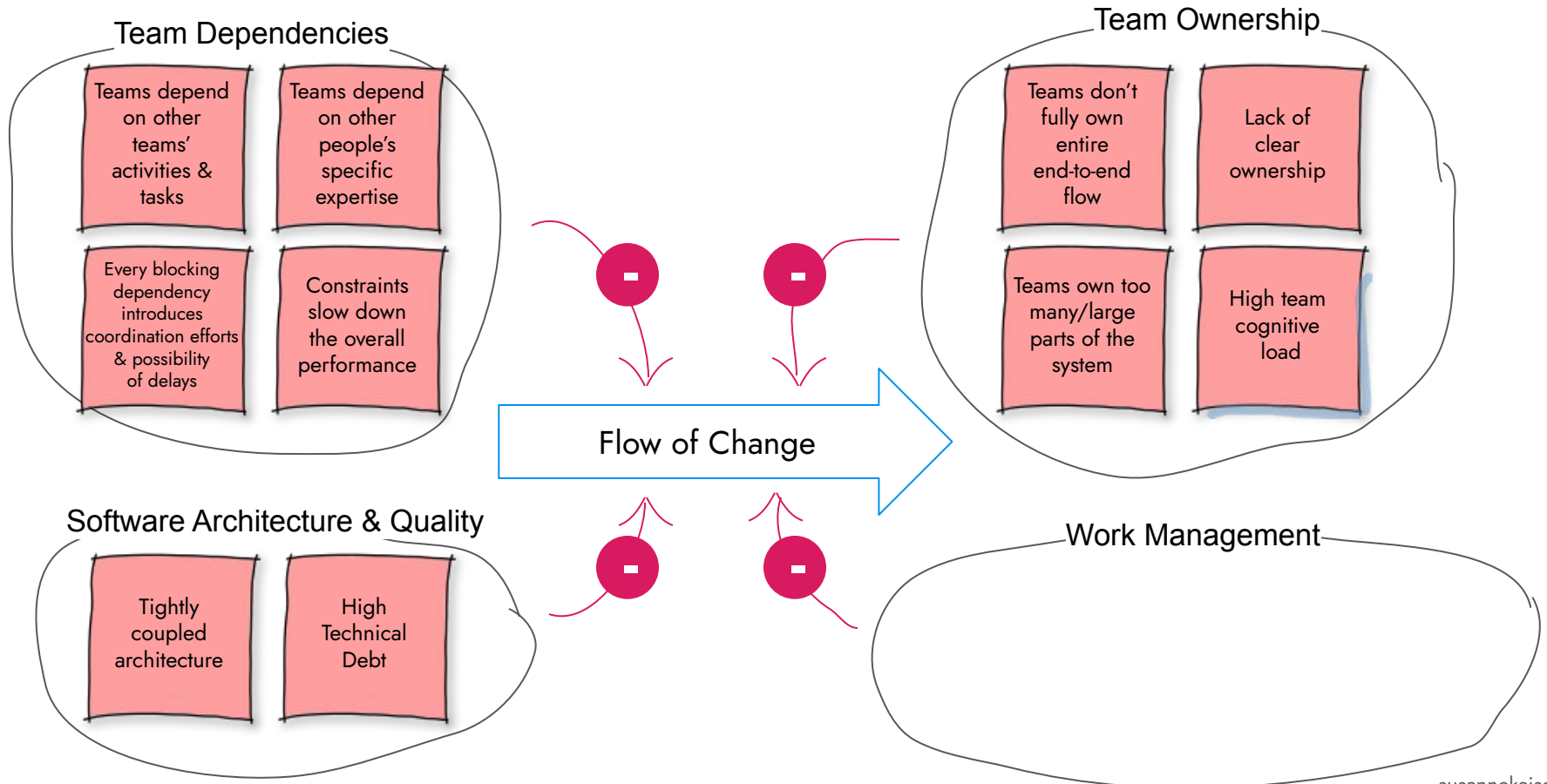
What is Preventing Flow? (Examples)



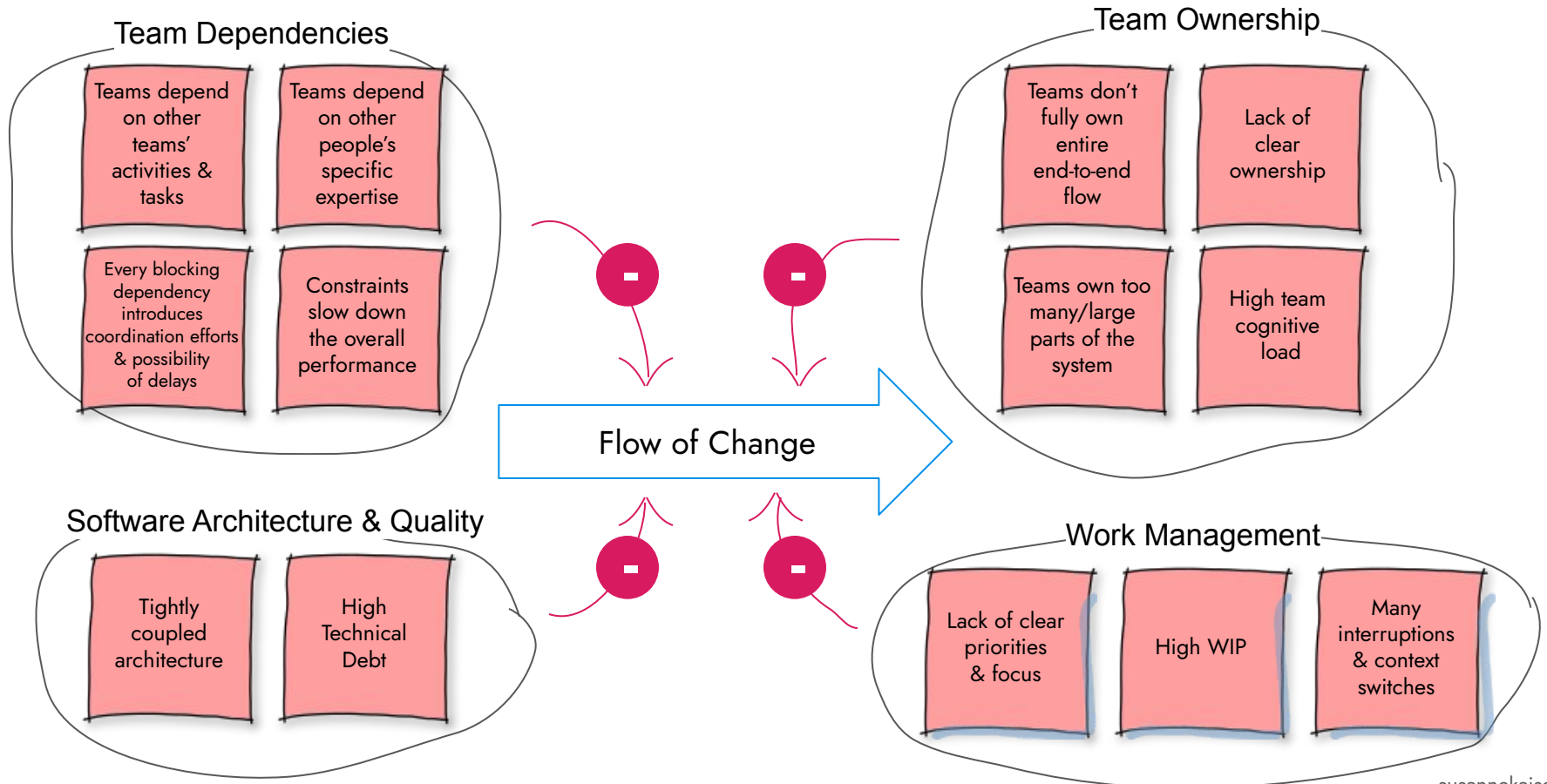
What is Preventing Flow? (Examples)



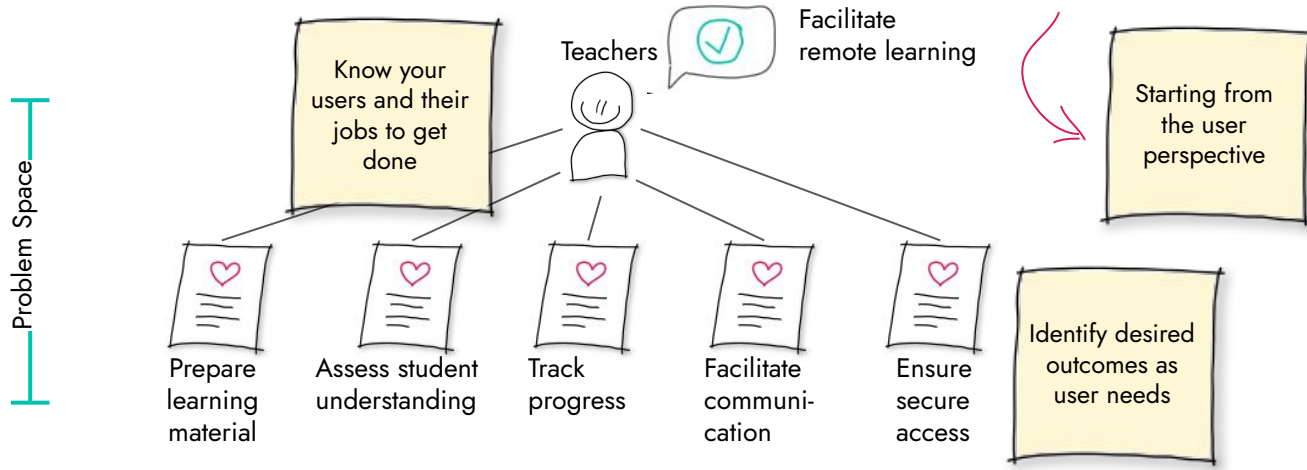
What is Preventing Flow? (Examples)



What is Preventing Flow? (Examples)



Mapping the Current Business Landscape



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

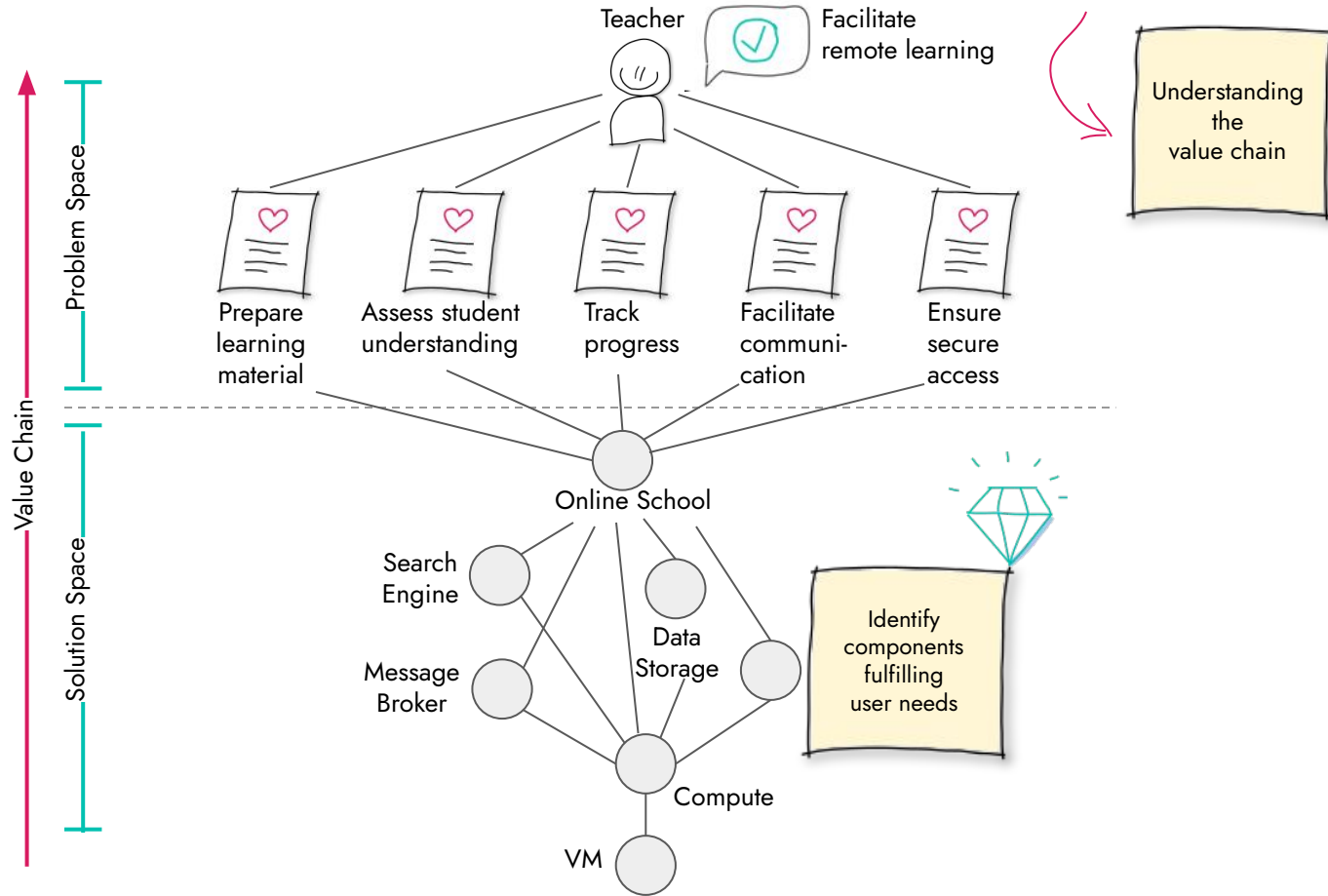
Clayton Christensen

WARDLEY MAPS
TOPOGRAPHICAL
INTELLIGENCE IN
BUSINESS



SIMON WARDLEY

Mapping the Current Business Landscape

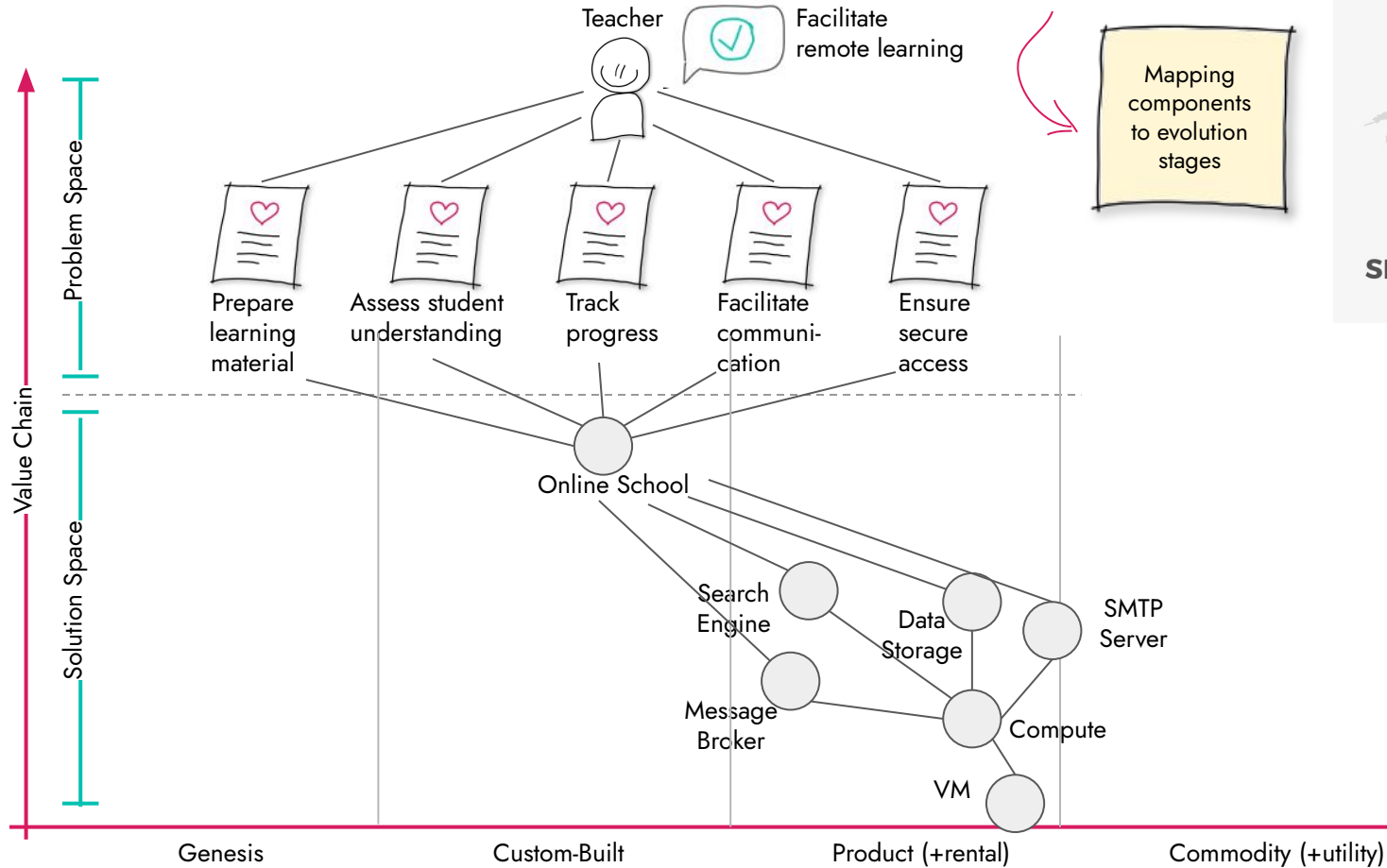


WARDLEY MAPS
TOPOGRAPHICAL
INTELLIGENCE IN
BUSINESS



SIMON WARDLEY

Mapping the Current Business Landscape

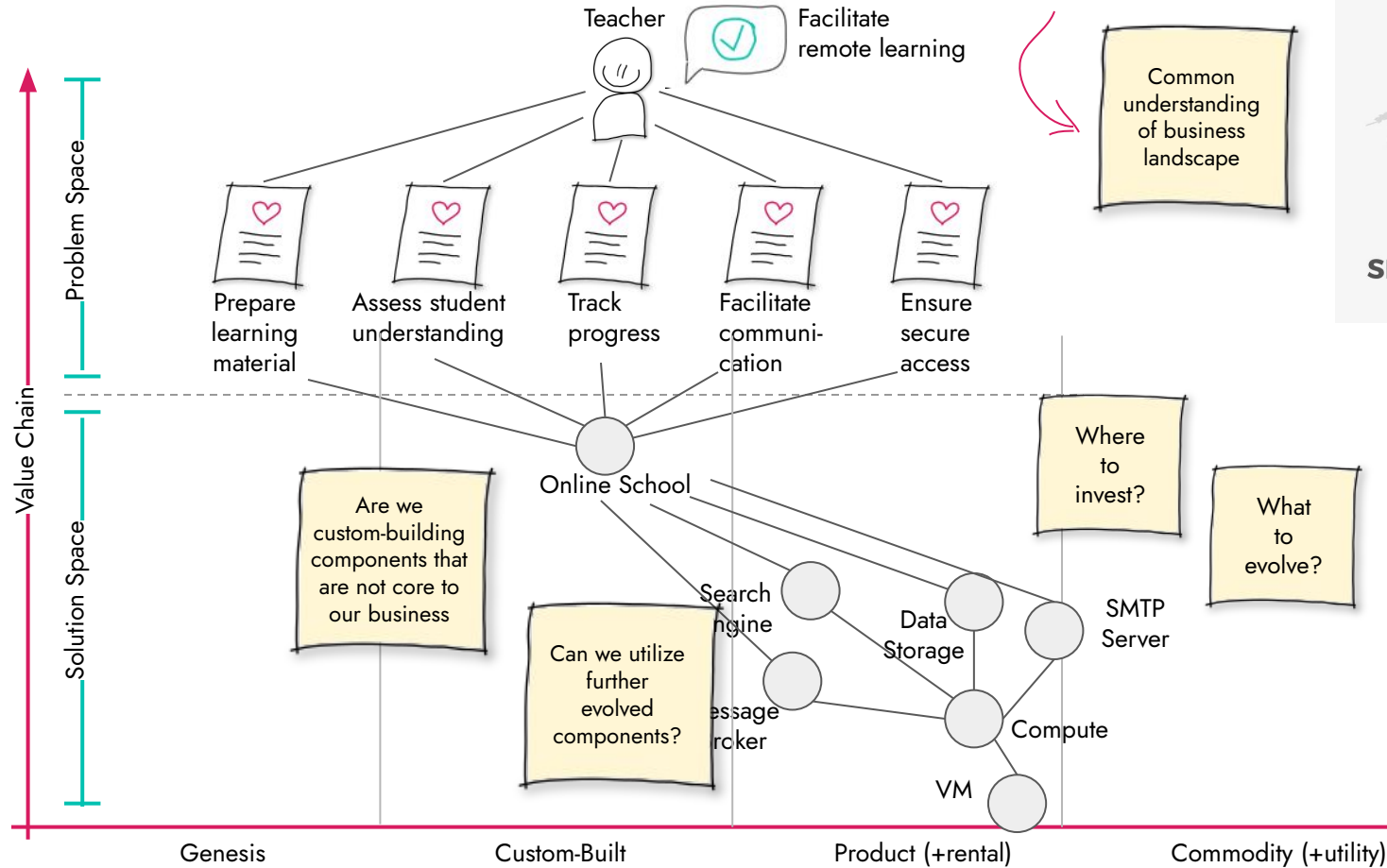


WARDLEY MAPS
TOPOGRAPHICAL
INTELLIGENCE IN
BUSINESS



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Mapping the Current Business Landscape



WARDLEY MAPS
TOPOGRAPHICAL
INTELLIGENCE IN
BUSINESS



SIMON WARDLEY

Categorizing the Problem Space



1

Current Issues & Wishes of Working
What are the current issues of working?
What are the wishes of the customer of the product?
What are the wishes of the customer of the product?
What are the wishes of the customer of the product?
What are the wishes of the customer of the product?
What are the wishes of the customer of the product?

2

Current Plan
What are the current plans?
What are the current plans?

Flow of Changes / Value

3

Current Business Landscape
Visualizing the business landscape with the business map

Business Map

4

Categorizing the Problem Space
Dividing the problem space into categories

Problem Space



5

Visualizing the Solution Space
Visualizing the solution space with the solution map

Solution Map

6

Future Business Landscape & Business Canvas
Visualizing the future business landscape with the business map

Business Map

7

Future Space Categorizing Boundaries
Visualizing the future space categorizing boundaries

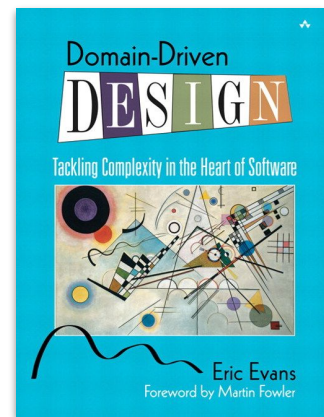
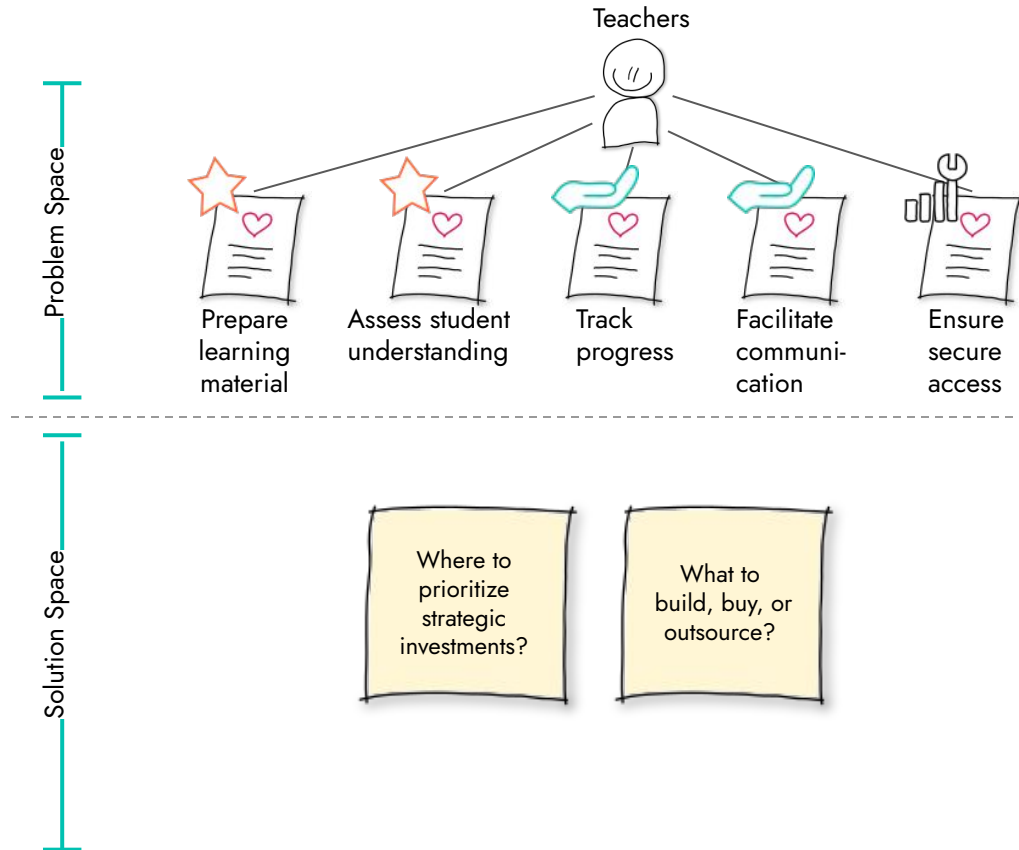
Future Space




8

Future Space Categorization & Subcategory Studies
Visualizing the future space categorization & subcategory studies

Future Space

Categorizing the Problem Space



-  Core Domain
-  Supporting Subdomain
-  Generic Subdomain

Modularizing the Solution Space



1

Current Status & Vision of Working
What are the current issues/problems?
What are the goals of the system to be built?
What are the main drivers?
What are the current state (dependencies)?
What are the current state (dependencies)?
What are the current state (dependencies)?
What are the current state (dependencies)?

2

Current Plan
What will be the plan?
What is the current plan?

Development stages, dependencies, flow
What is the current plan?

Flow of Changes / Value

3

Current Business Landscape
Visualizing the business landscape with the business map

Business map



5

Modularity in the Solution Space
Decomposing solution space into bounded contexts (design decisions)

It's with Core/Service

6

Future Business Landscape & Bounded Contexts
Visualizing the future business landscape with the business map

Business map

7

Future Space Delineating Boundaries
Visualizing future state, identifying boundaries

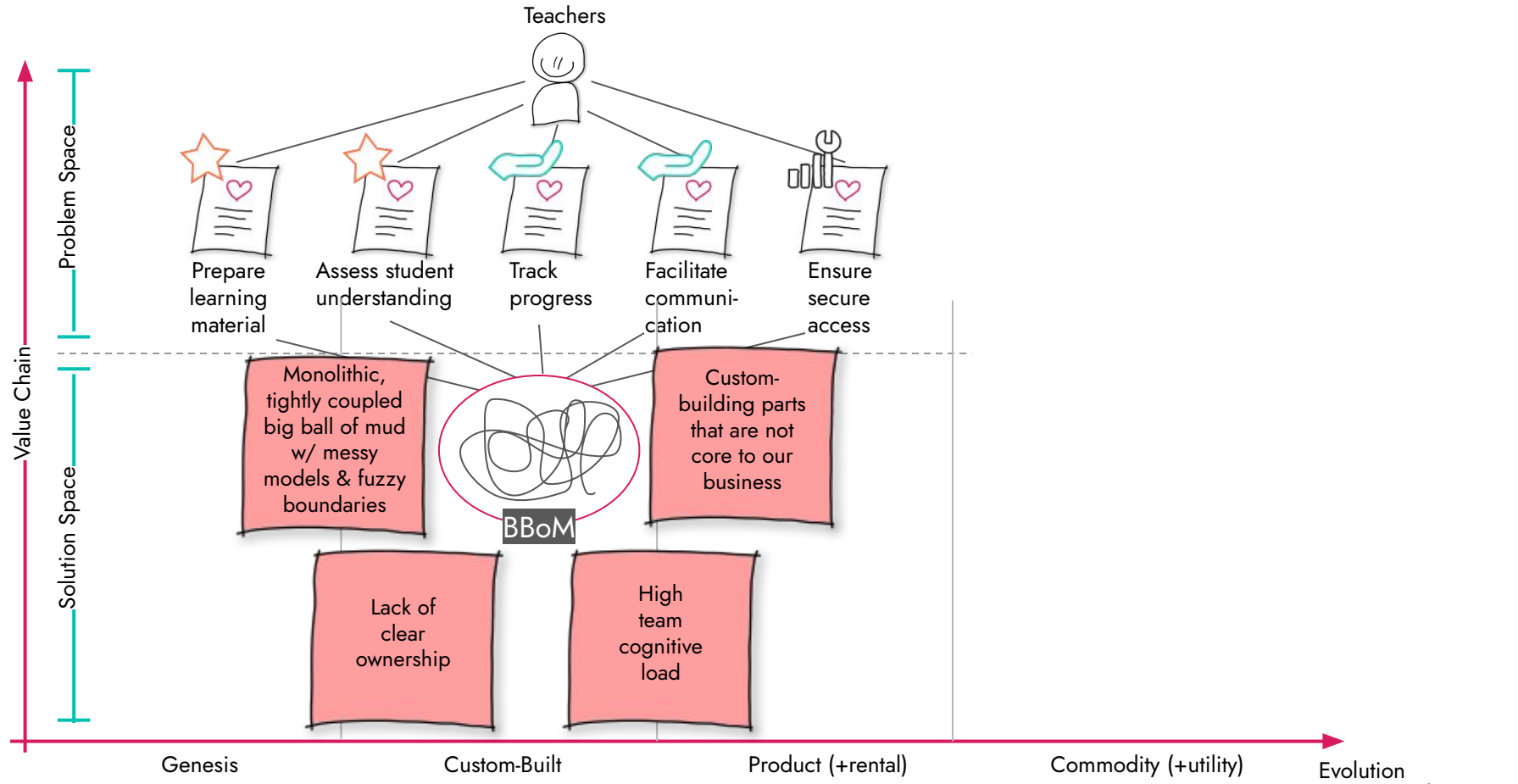
Business map

8

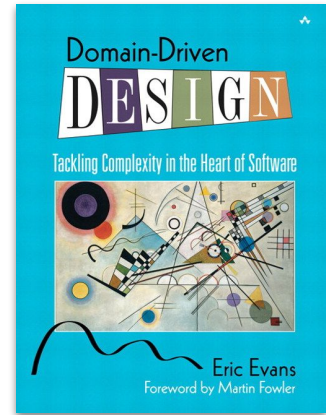
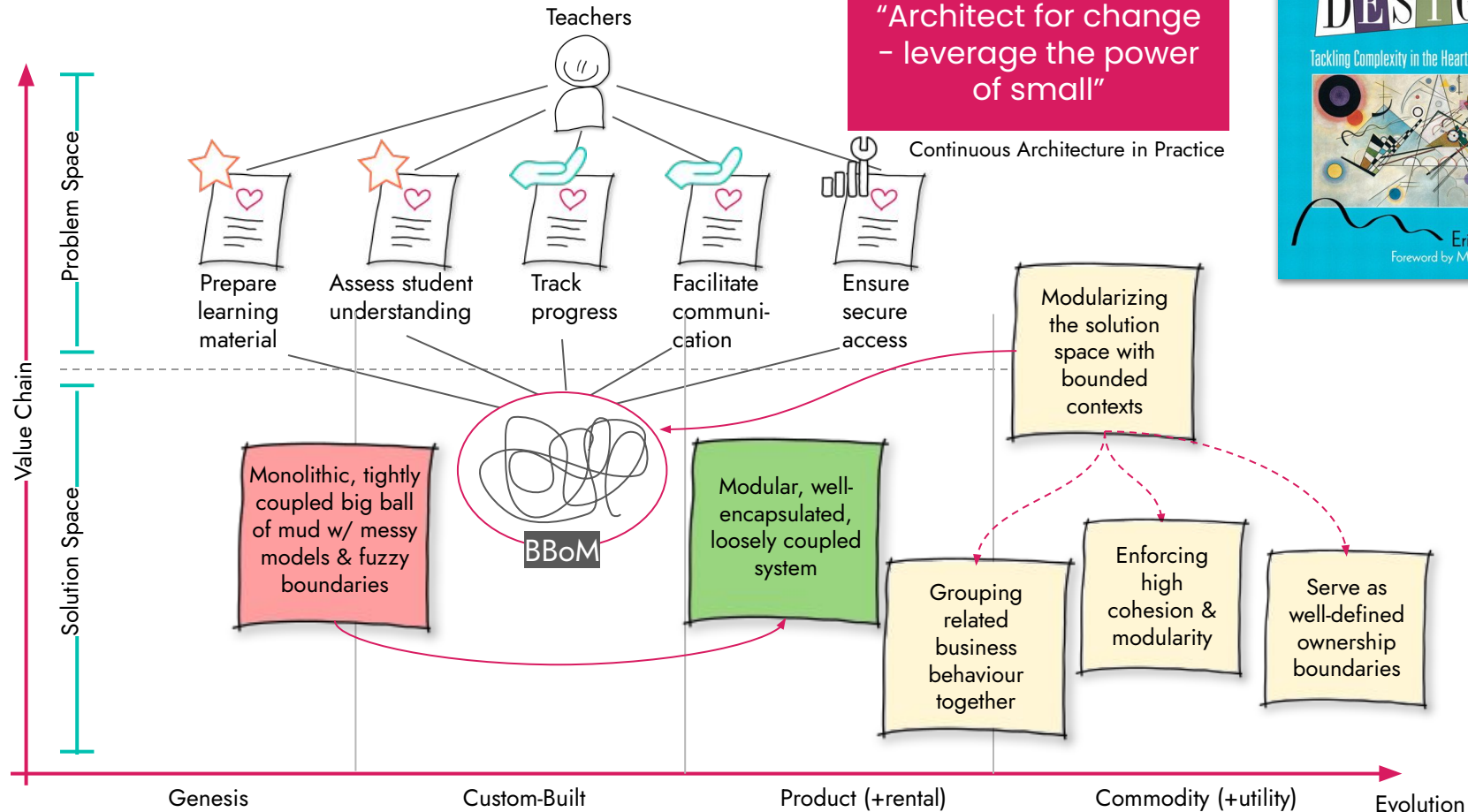
Future Space Contribution & Interaction Studies

Business map

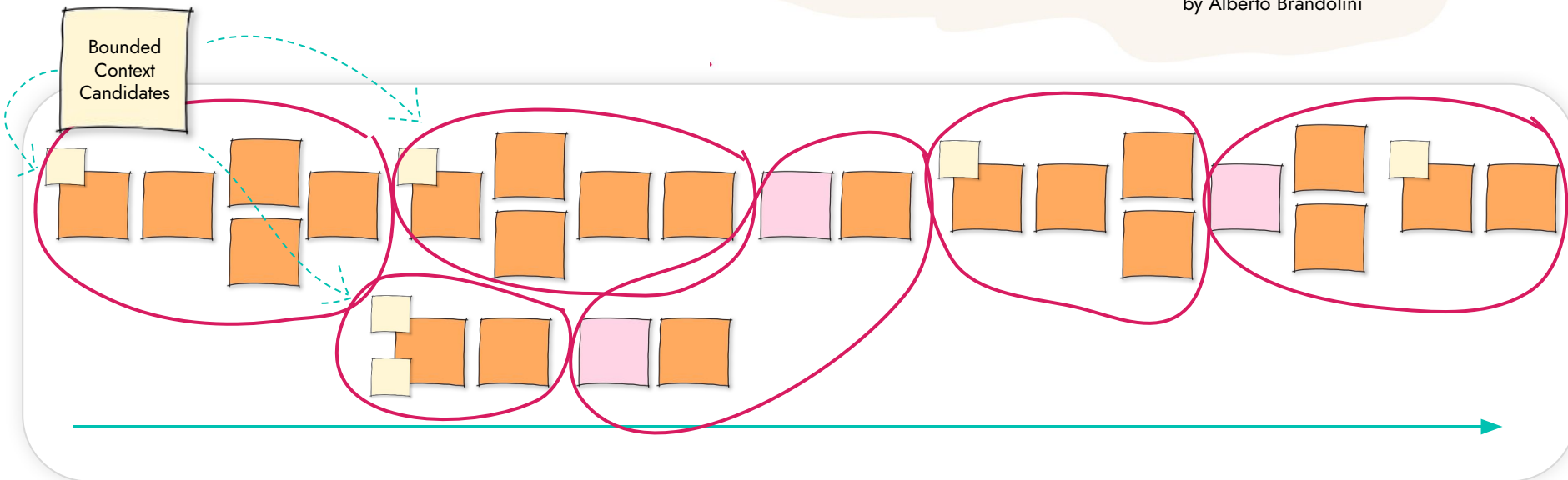
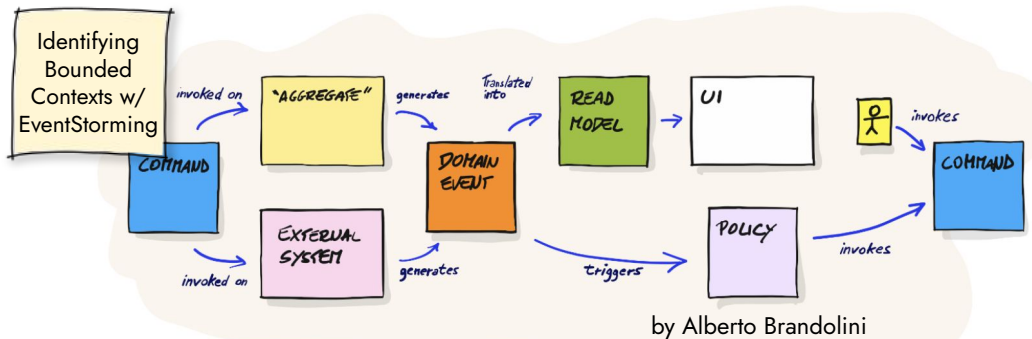
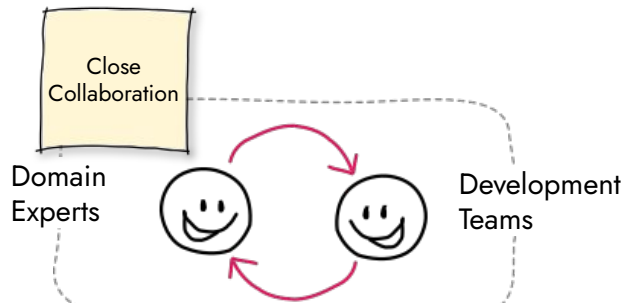
Modularizing the Solution Space



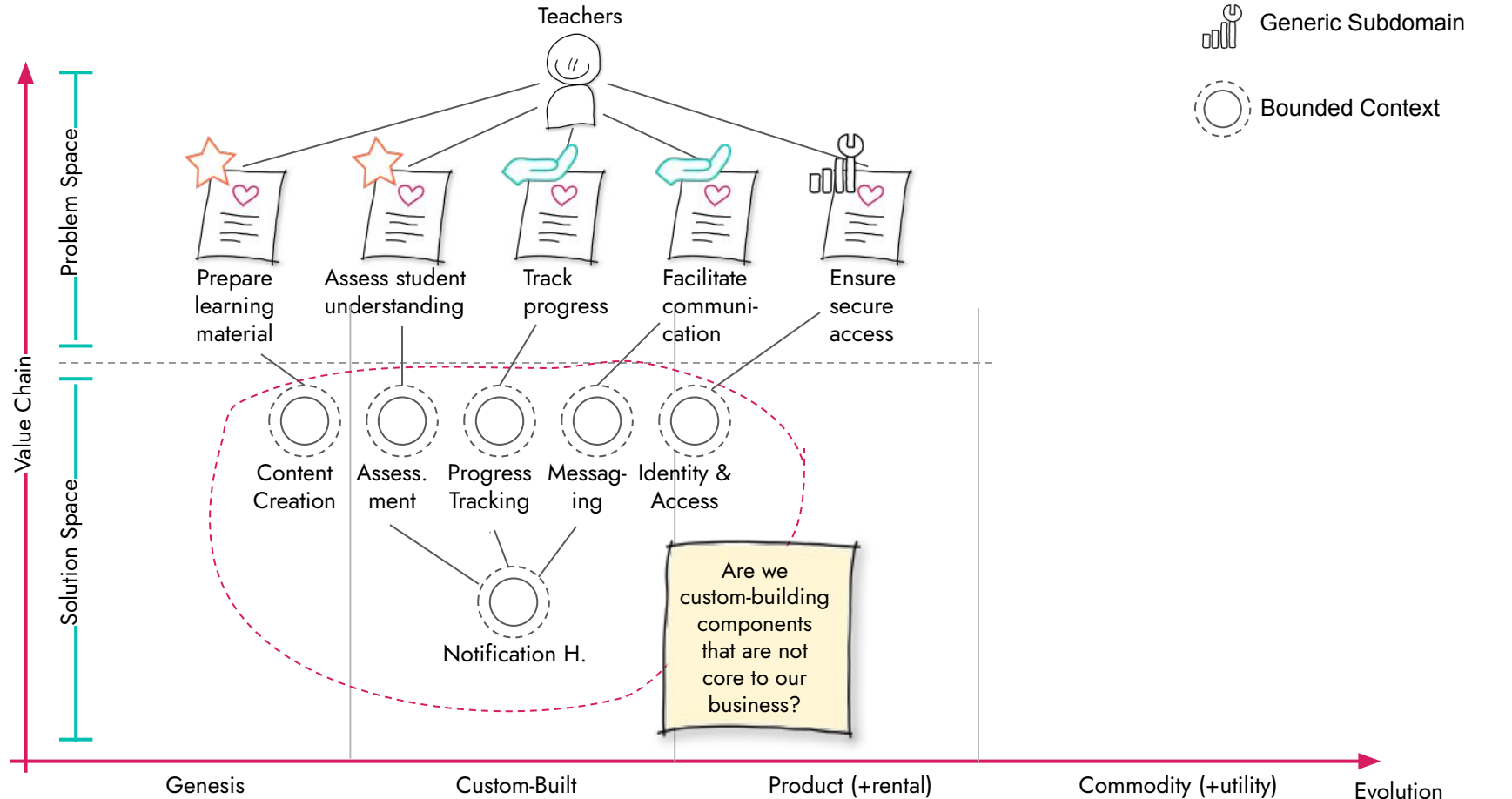
Modularizing the Solution Space



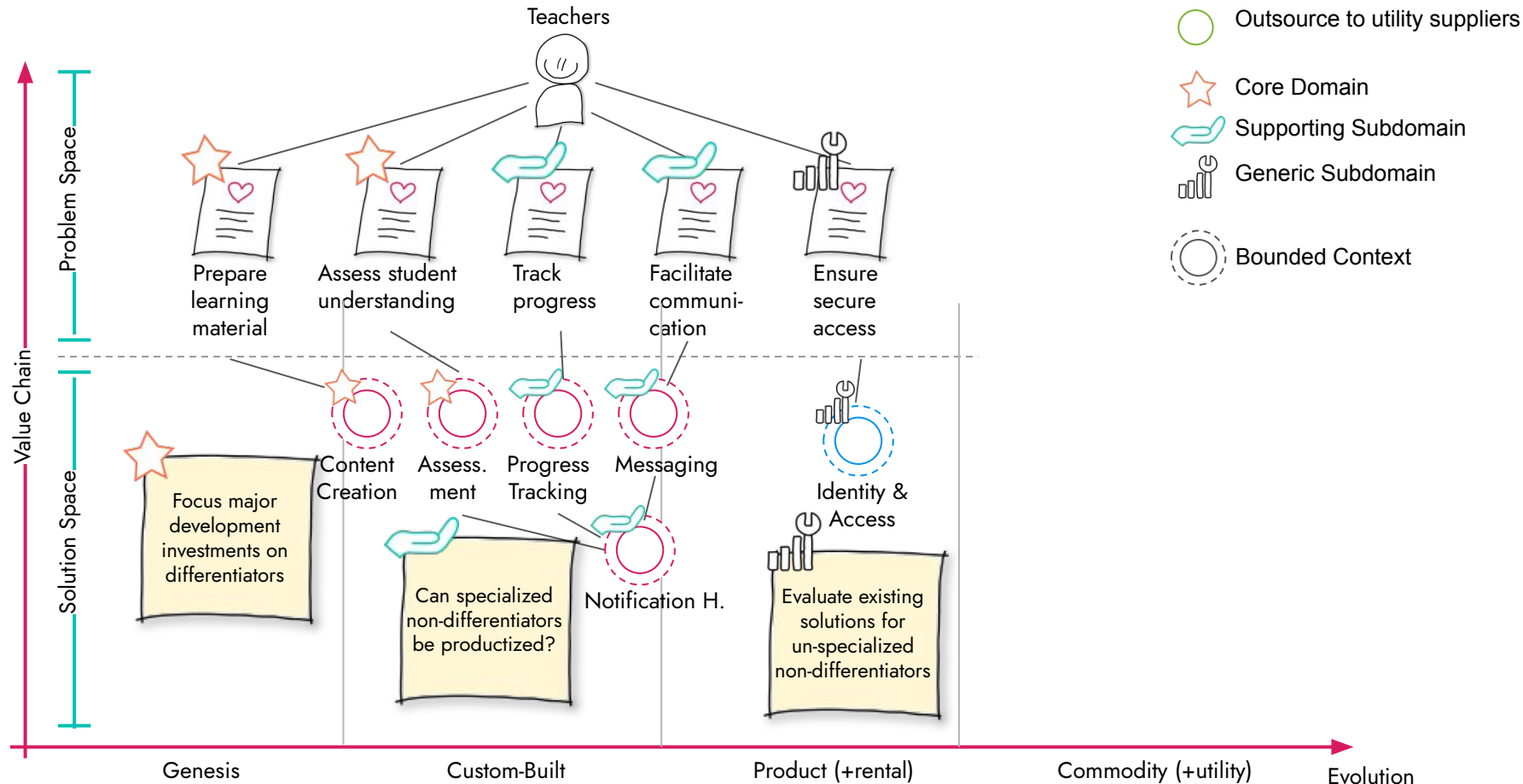
Modularizing the Solution Space



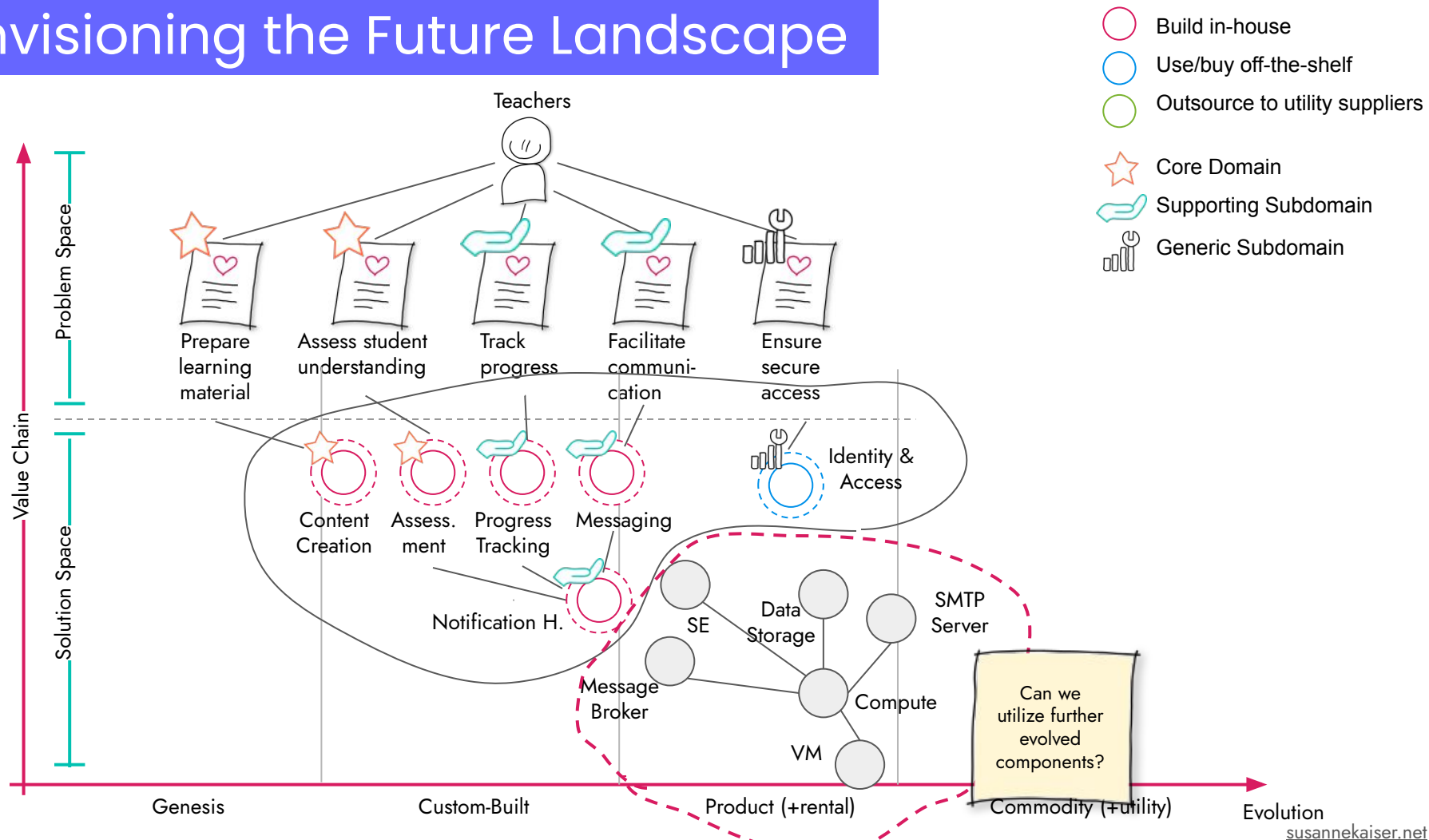
Envisioning the Future Landscape



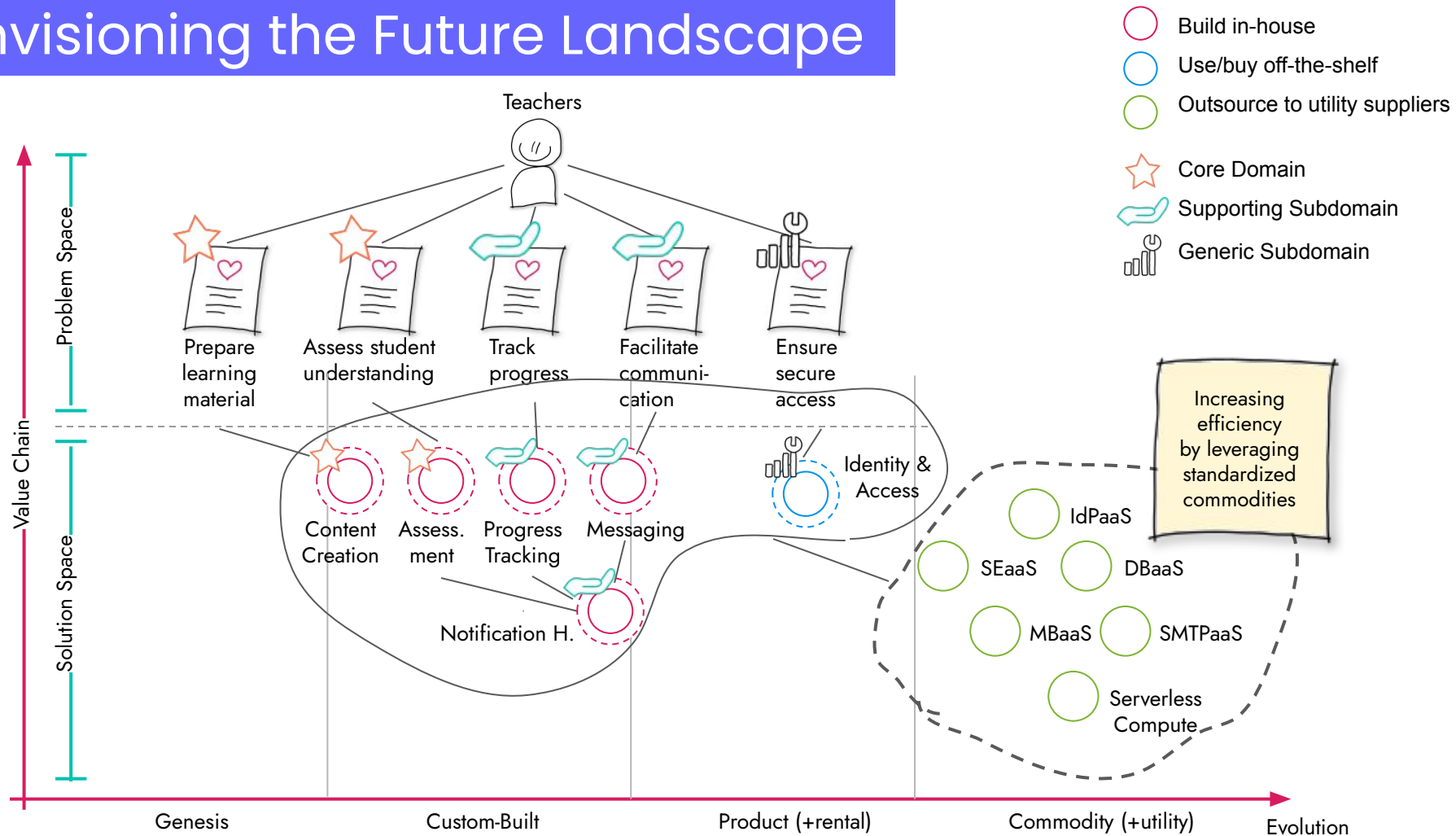
Envisioning the Future Landscape



Envisioning the Future Landscape



Envisioning the Future Landscape



Aligning Teams & Evolving Interactions



1

Current Teams & Ways of Working

What are the current teams (if any)?
What are the ways of working (if any)?
What are the current team structures (if any)?
What are the current team interactions (if any)?
What are the current team processes (if any)?
What are the current team outcomes (if any)?

2

Current Plan

What are the current plans (if any)?

Development stages, long-term plan

What are the current plans (if any)?

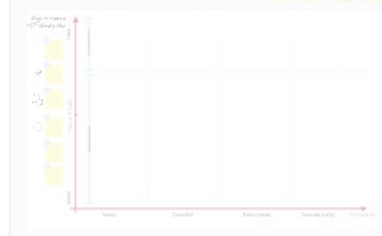


3

Current Business Landscape

Visualizing the business landscape with the Value Map

What are the current business landscapes (if any)?



5

Visualizing the Solution Space

Visualizing solution space (if any) based on current (change) elements



6

Future Business Landscape & Business Context

Visualizing future business landscape with the Value Map

What are the future business landscapes (if any)?

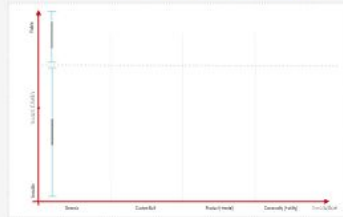


7

Future Team Operating Boundaries

Identifying future team operating boundaries

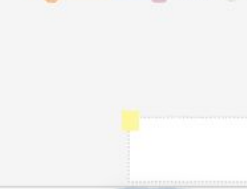
What are the future team operating boundaries (if any)?



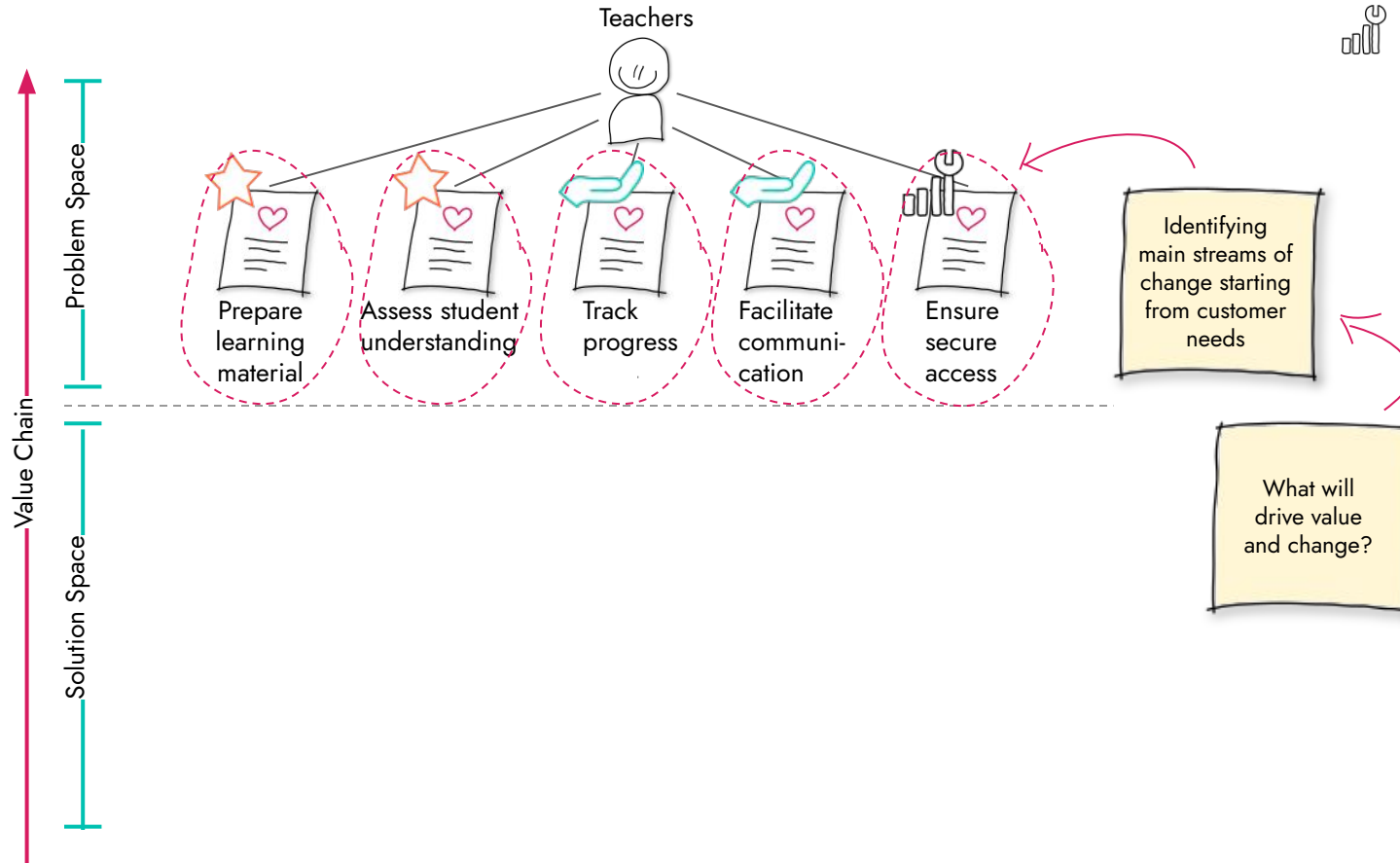
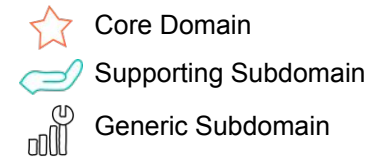
8

Future Team Coordination & Interaction Modes

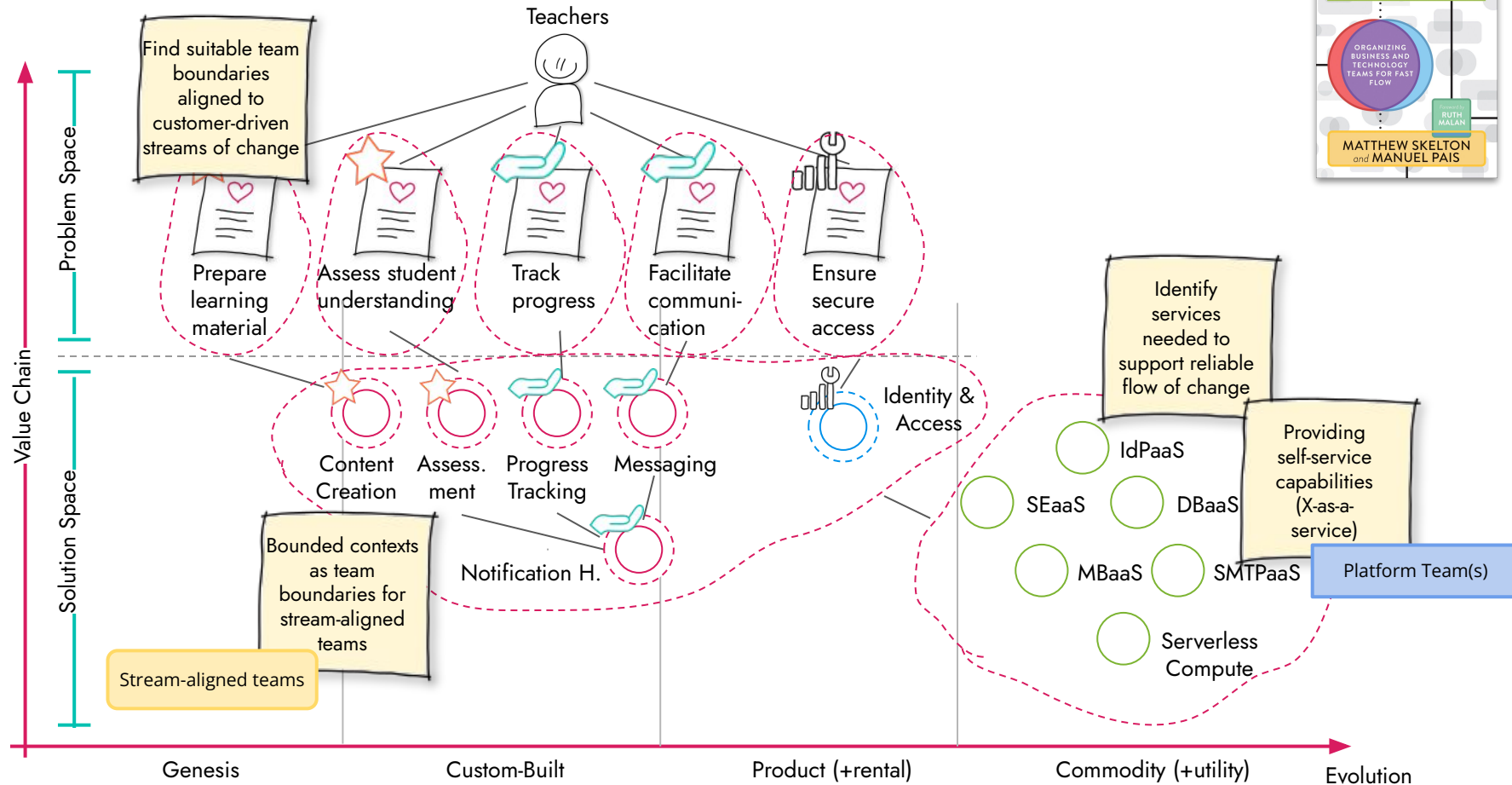
What are the future team coordination & interaction modes (if any)?



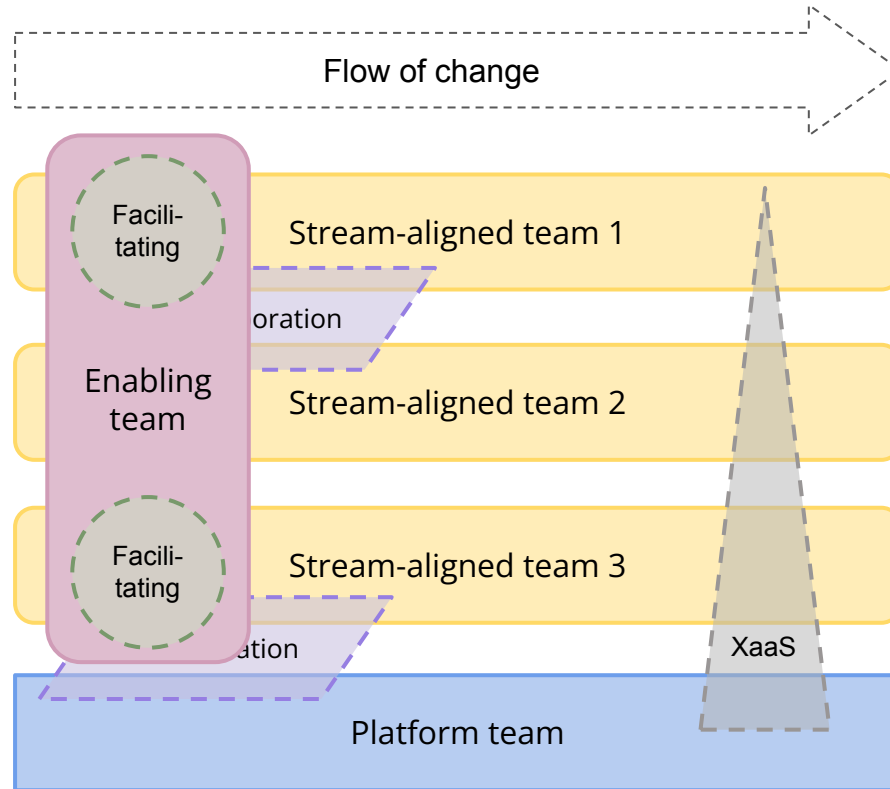
Aligning Teams & Evolving Interactions



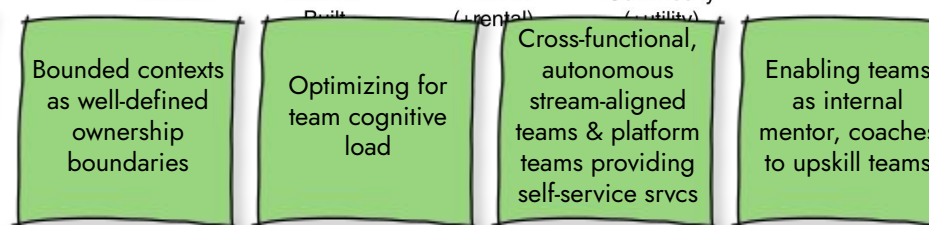
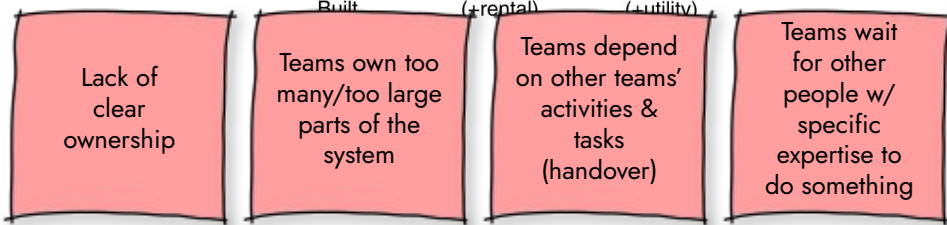
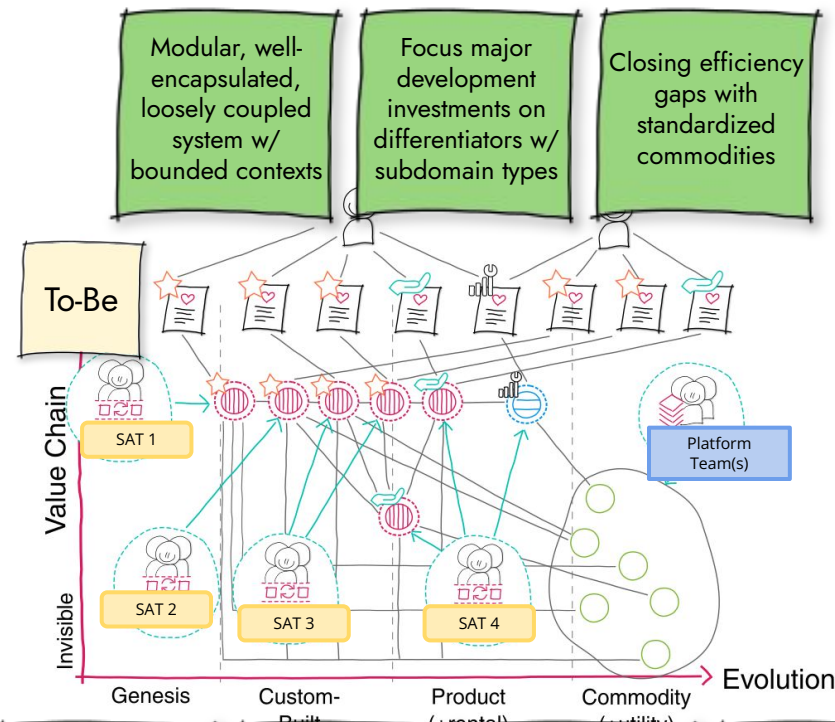
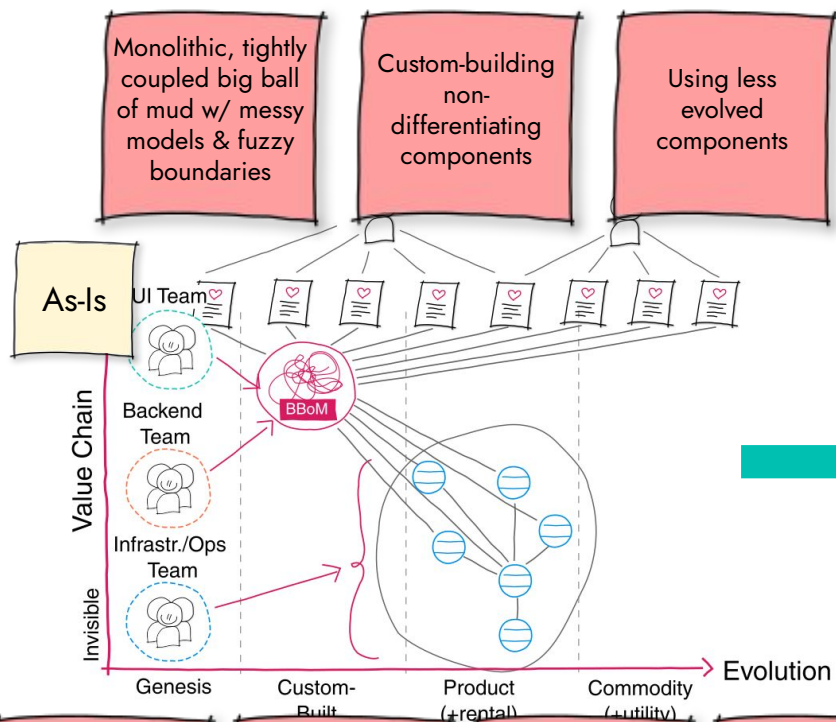
Aligning Teams & Evolving Interactions



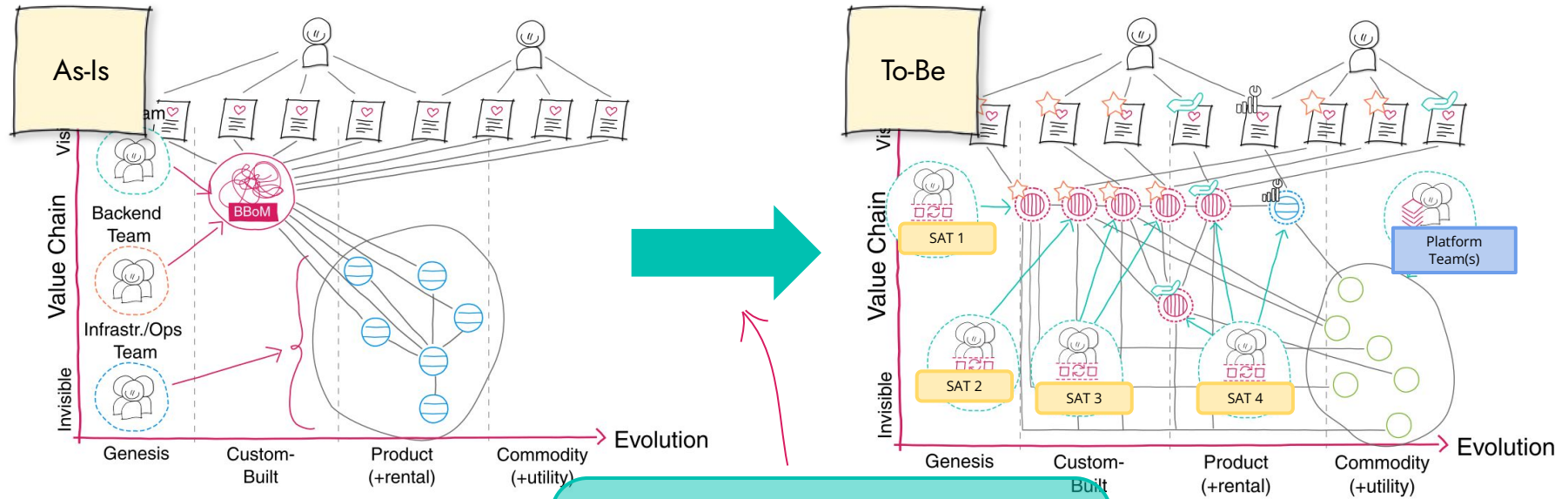
Evolving Team Interactions



Unlocking Blockers to Flow



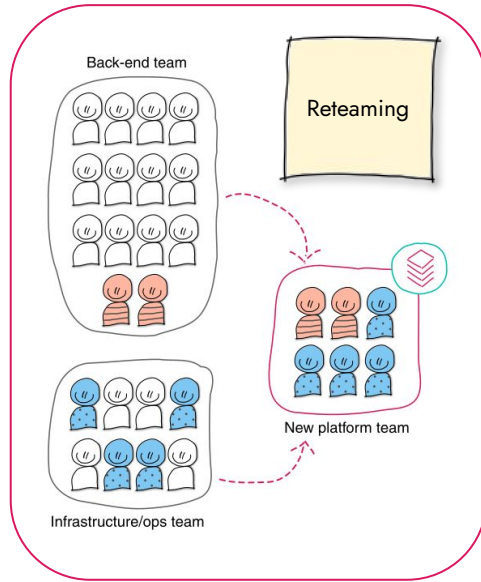
How to Transition?



Incremental Evolution

Incremental Evolution (Example)

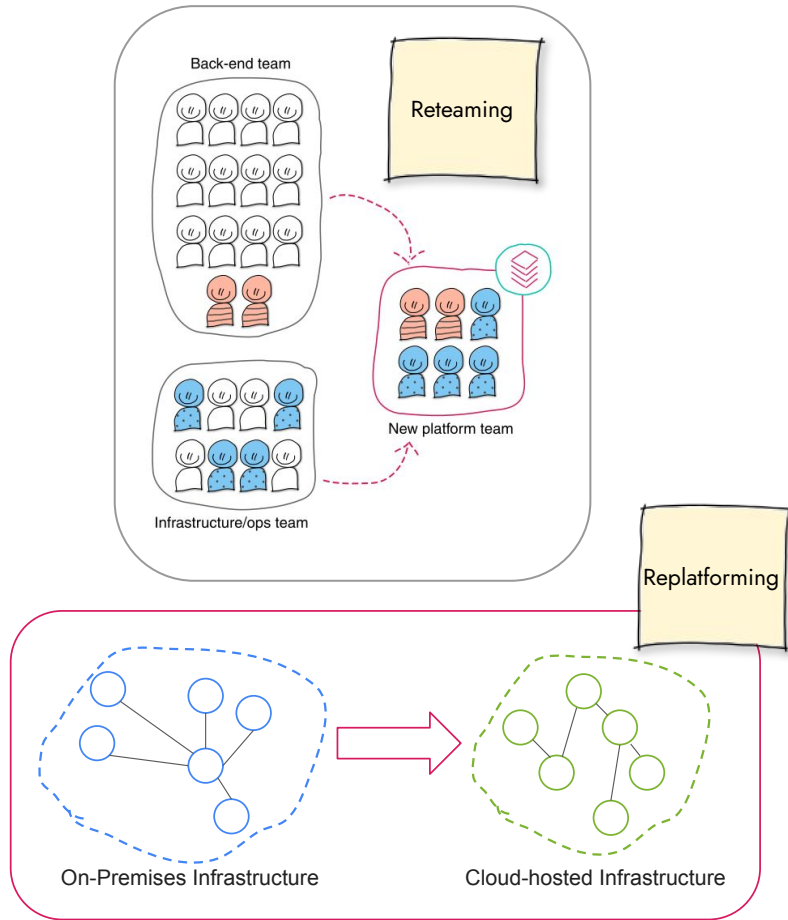
Reteaming



Incremental Evolution (Example)

Reteaming

Replatforming

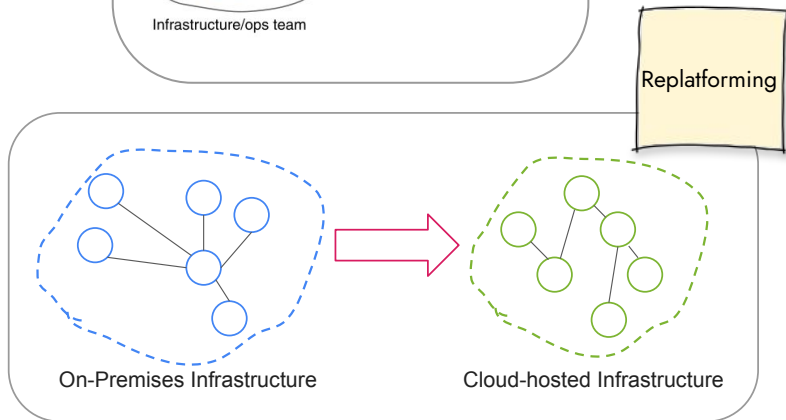
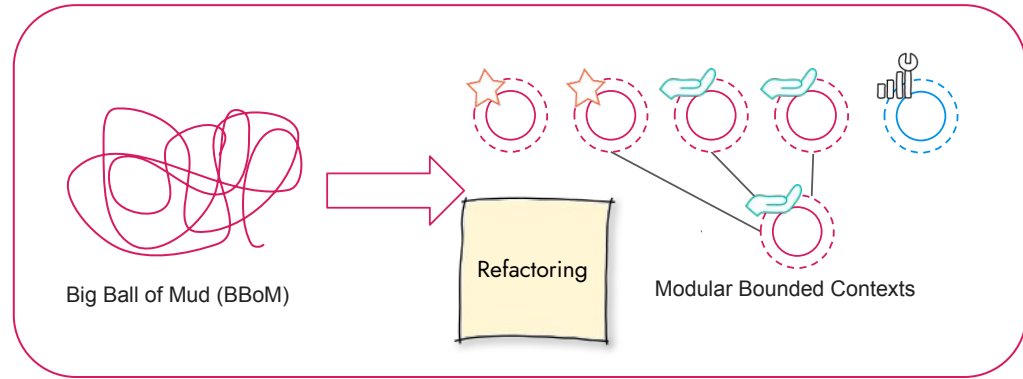
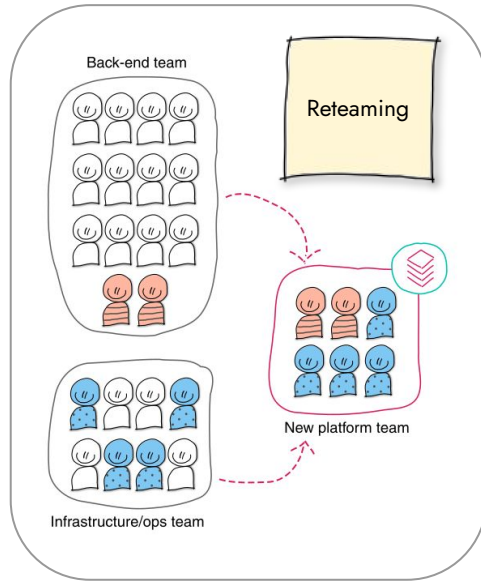


Incremental Evolution (Example)

Reteaming

Replatforming

Refactoring



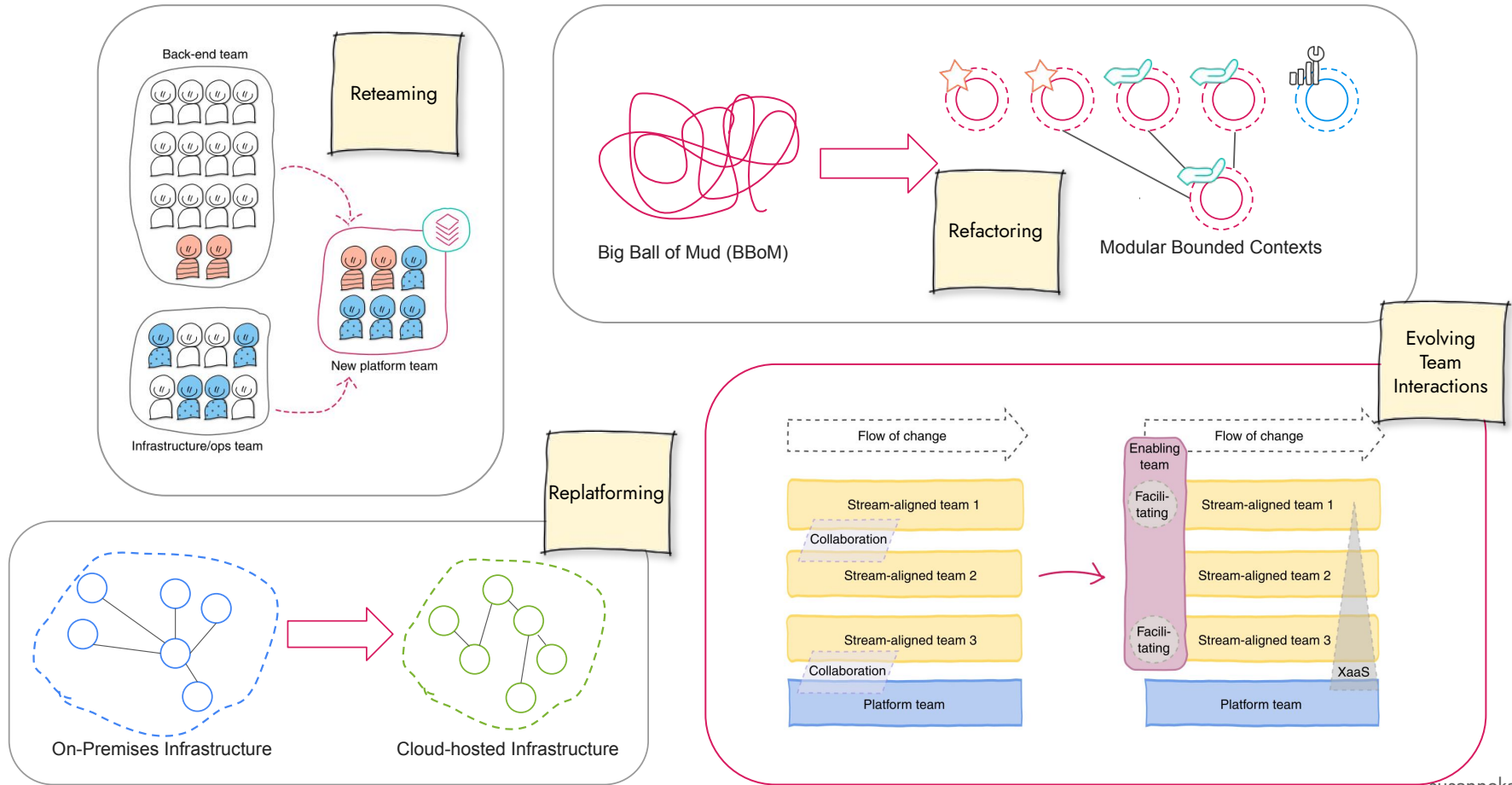
Incremental Evolution (Example)

Reteaming

Replatforming

Refactoring

Evolving Team Interactions



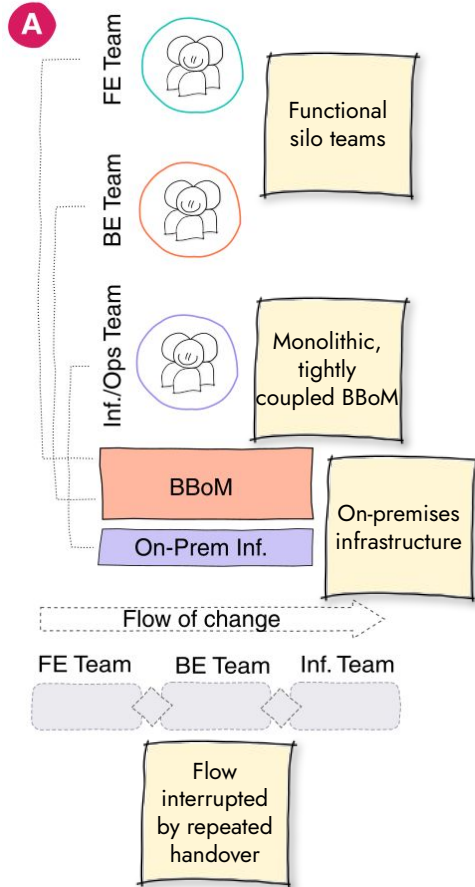
Incremental Evolution (Example)

Reteaming

Replatforming

Refactoring

Evolving Team Interactions



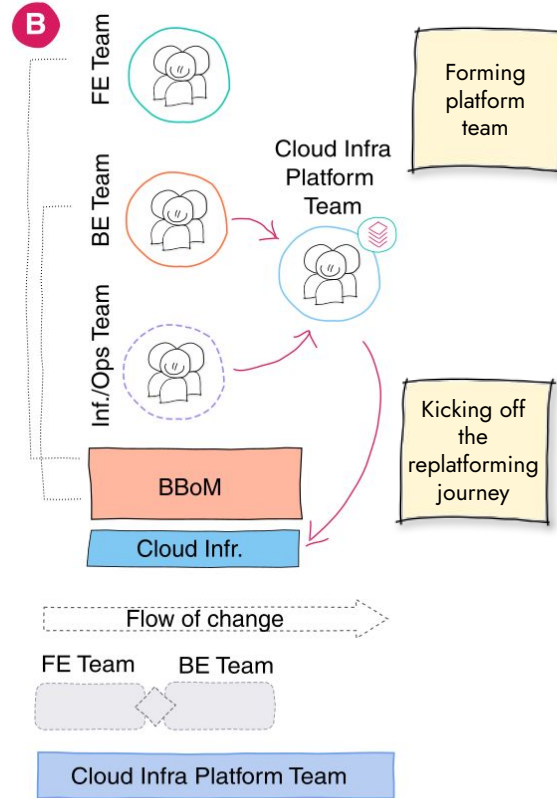
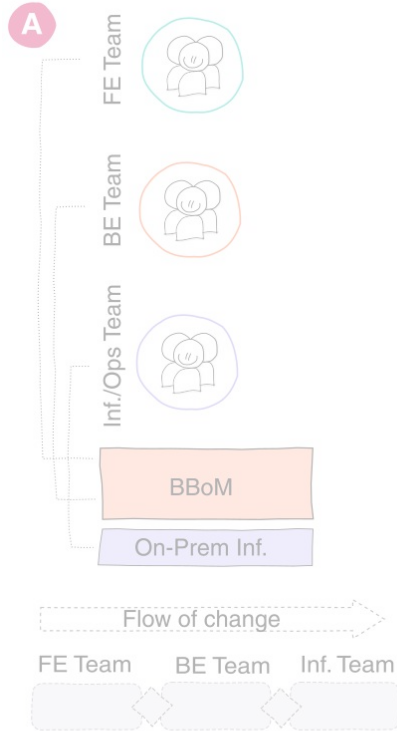
Incremental Evolution (Example)

Reteaming

Replatforming

Refactoring

Evolving Team Interactions



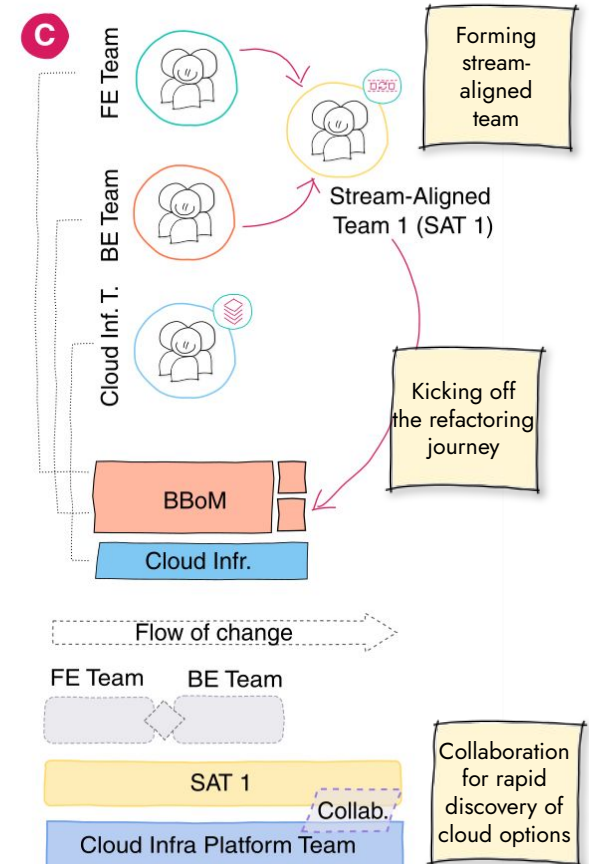
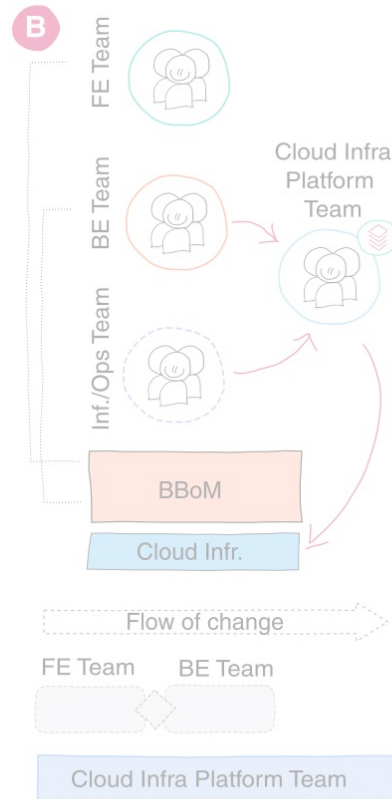
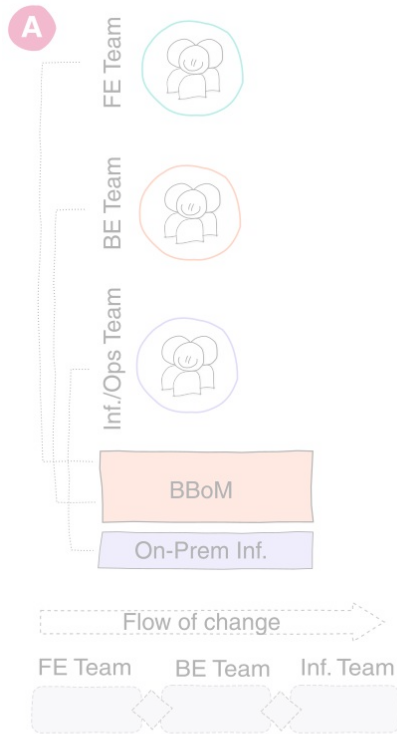
Incremental Evolution (Example)

Reteaming

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Evolving Team Interactions



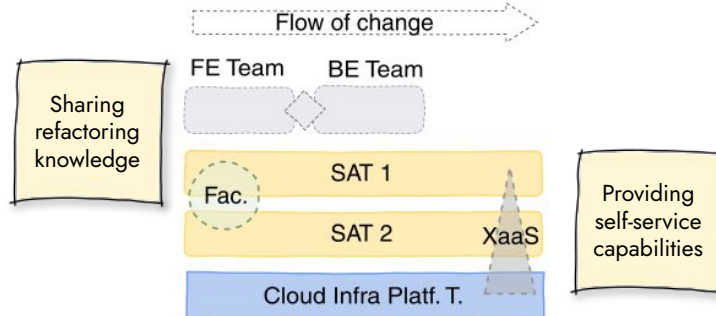
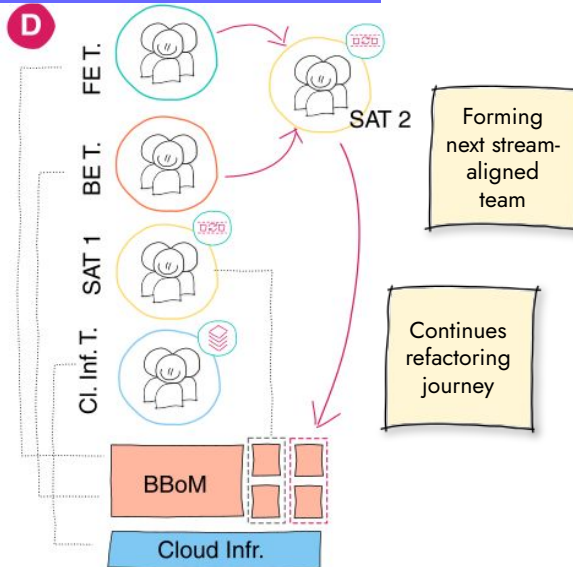
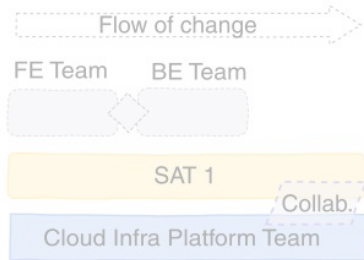
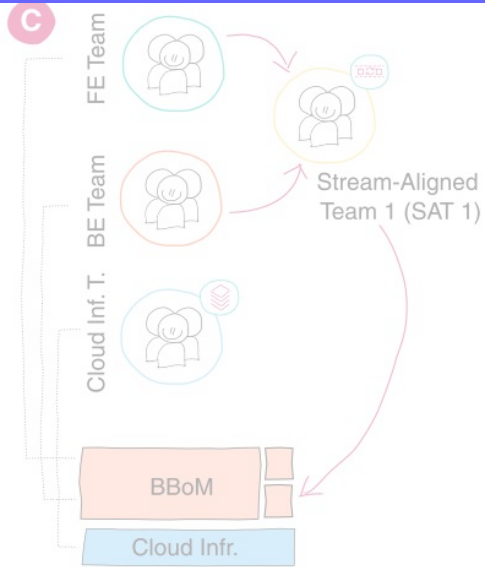
Incremental Evolution (Example)

Reteaming

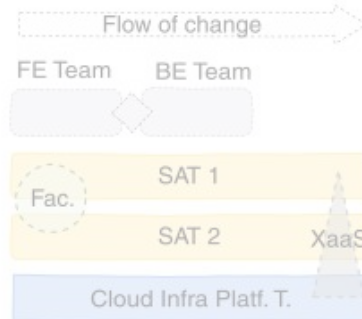
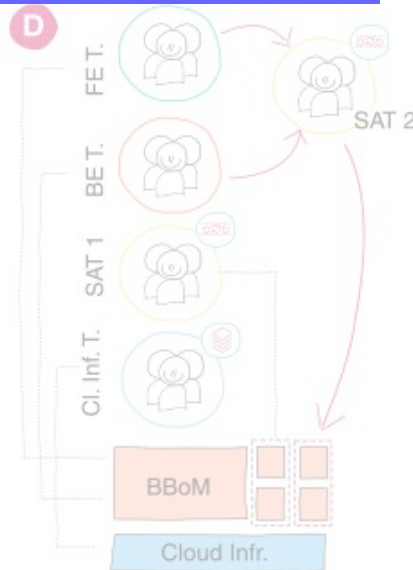
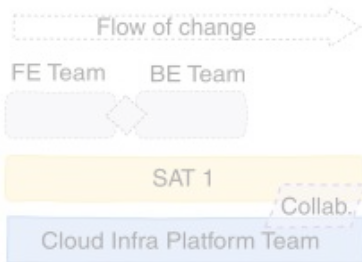
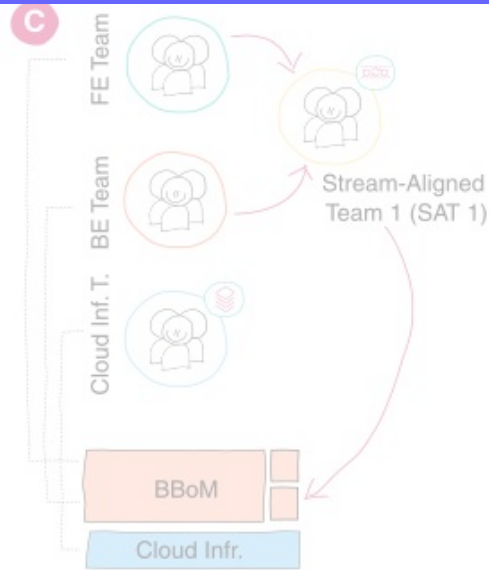
Replatforming

Refactoring

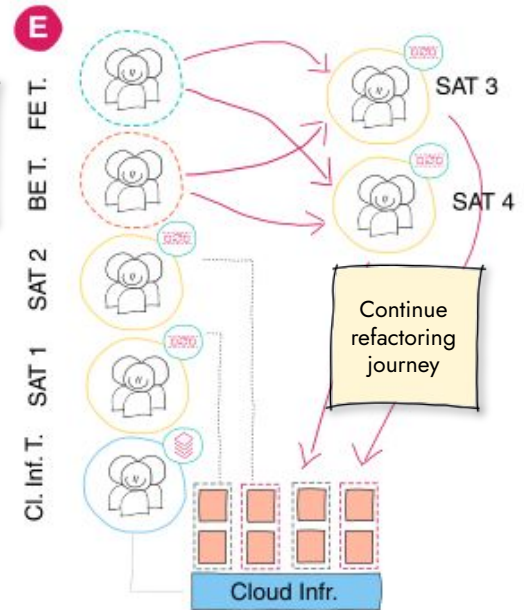
Evolving Team Interactions



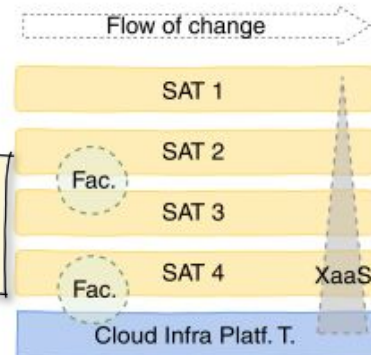
Incremental Evolution (Example)



Forming next stream-aligned teams



Upskilling on refactoring and cloud options



Providing self-service capabilities

Retesting

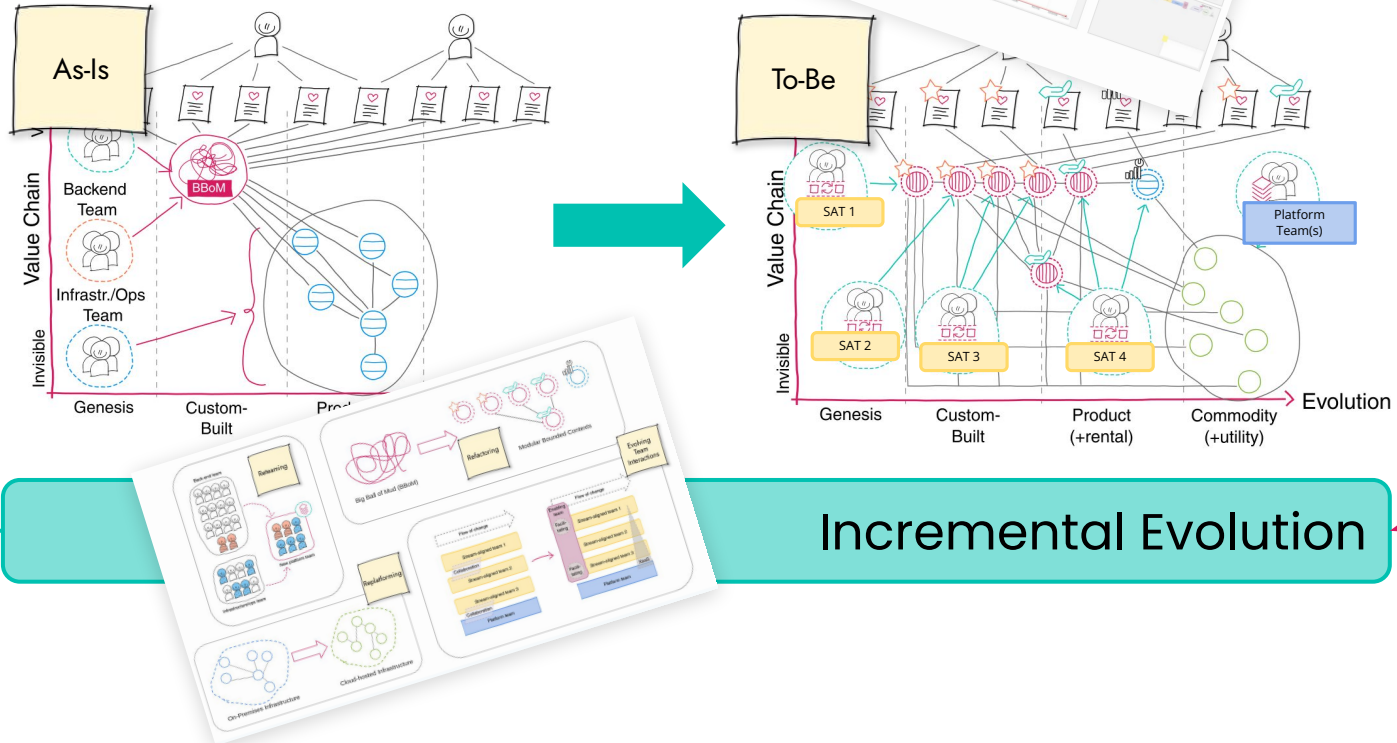
Replatforming

Refactoring

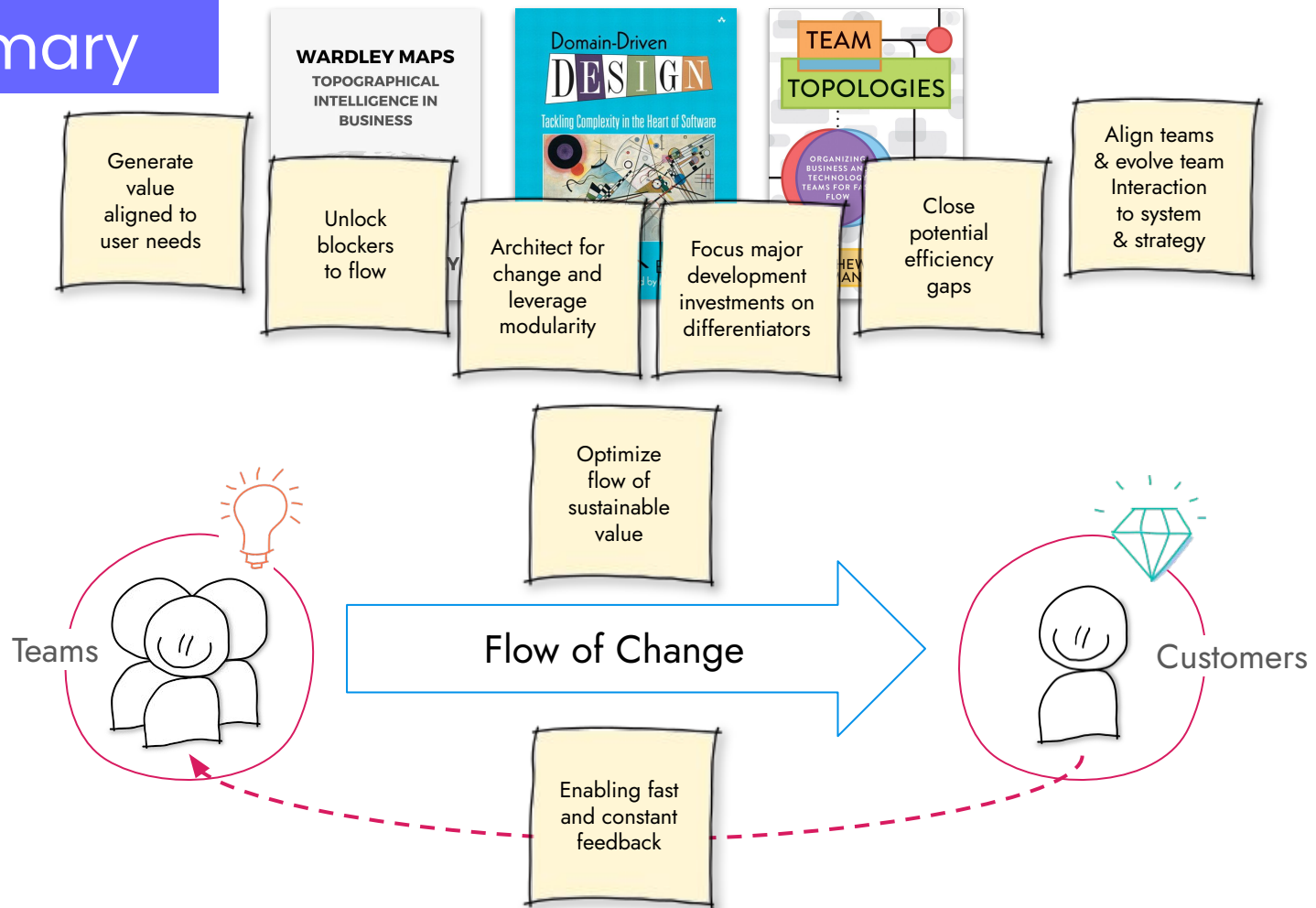
Evolving Team Interactions

Summary

Assess & Design



Summary



No silver bullet: Adapt these principles to your specific context, culture and challenges

Evolve your Legacy
System with Gratitude

Some Ressources

Architecture for Flow Canvas

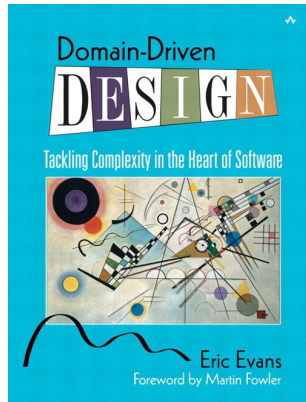
<https://susannekaiser.net/architecture-for-flow-canvas/>

Book Site

<https://architectureforflow.com>

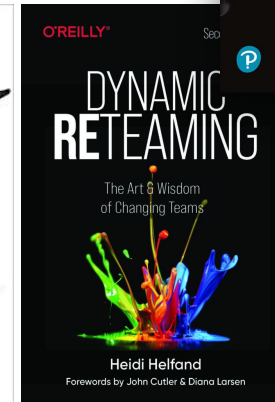
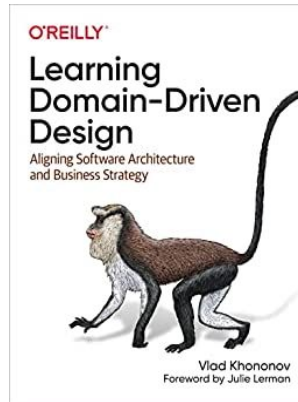
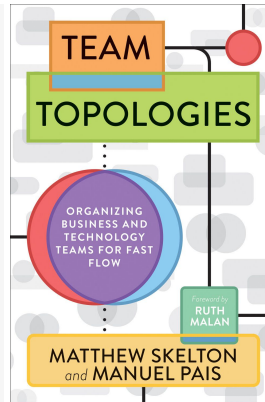
Case Study

<https://ninasiessegger.de/en/blog/re-teaming-for-faster-flow>

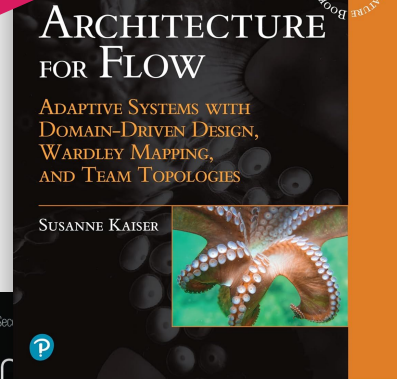


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<https://medium.com/wardleymaps>

<https://learnwardleymapping.com/>

<https://github.com/wardley-maps-community/awesome-wardley-maps>

<https://github.com/ddd-crew>

<https://www.dddheuristics.com>

Thank you!

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Link to
slide deck

