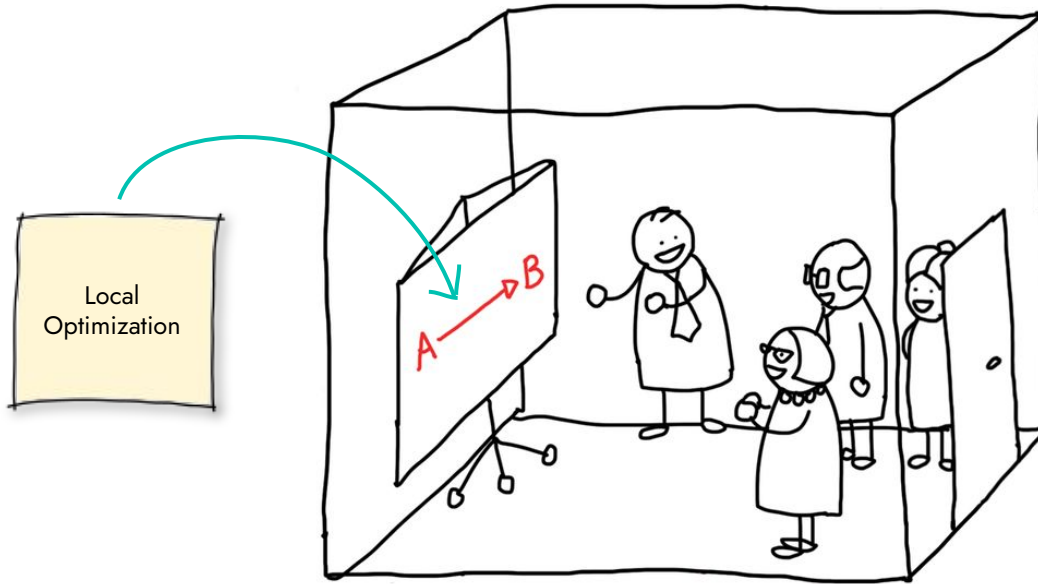


# Adaptive Socio-Technical Systems with Architecture for Flow

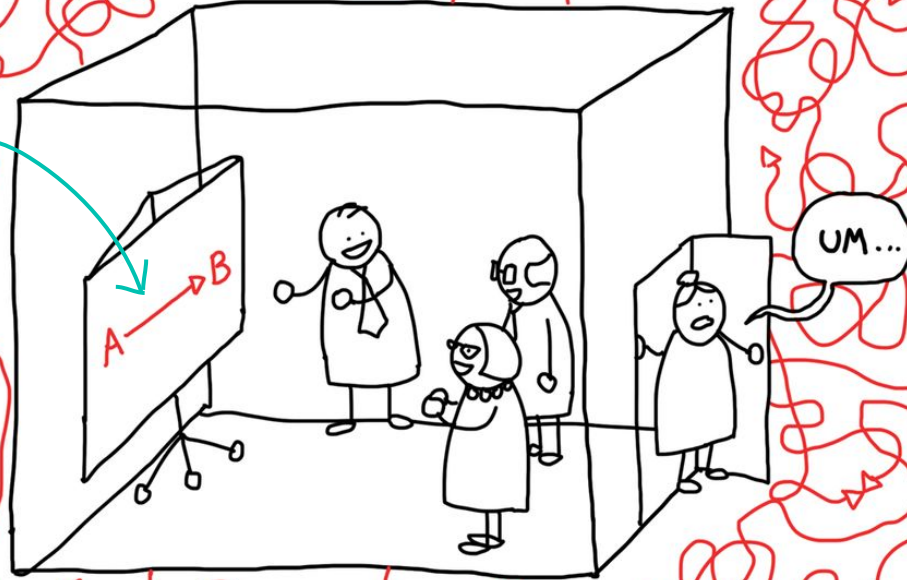
Susanne Kaiser  
Independent Tech Consultant  
Author of "Architecture for Flow"

# Local Optimization ...



... will not improve the overall performance

Local  
Optimization



"A system is more than the sum  
of the behaviour its parts; it's a  
product of their interactions."

Dr. Russell Ackoff

# Theory of Constraints

"Any improvement made  
anywhere besides the  
bottleneck is an illusion."

Eliyahu M. Goldratt



# Theory of Constraints

More work  
piling up

"Any improvement made  
anywhere besides the  
bottleneck is an illusion."

No effect  
other than  
sitting idle



Image Source: Zootopia

# 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

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

Dr. Russell Ackoff



Building the **wrong** thing **right**

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

John Cutler

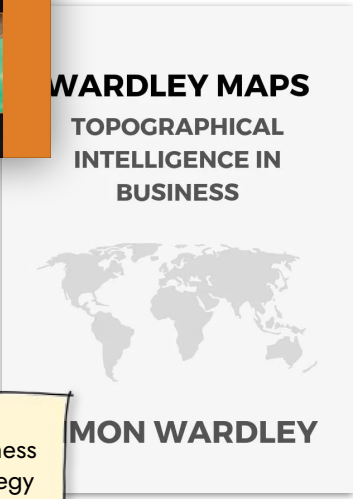
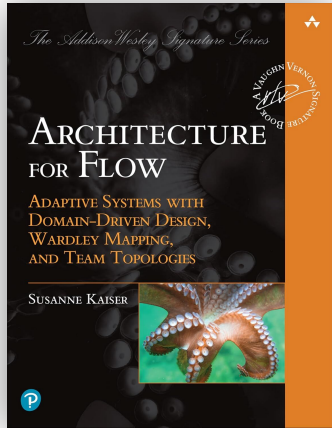


Building the **right** thing **wrong**

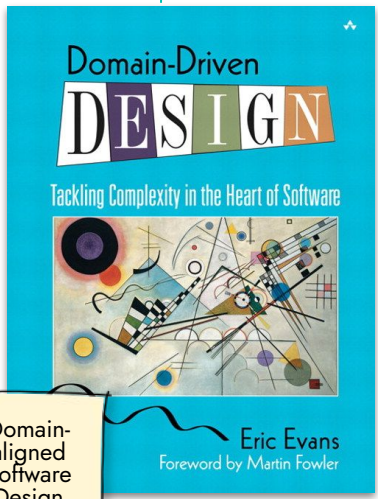
# Architecture for Flow

Building the **right** thing **right**

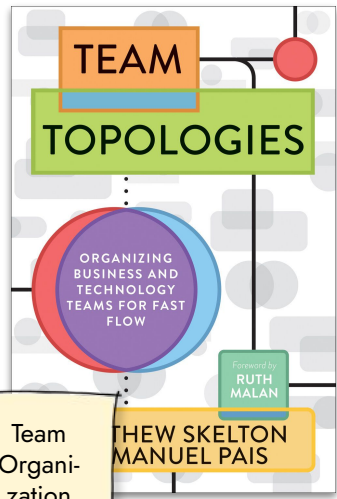
Adaptive, socio-technical systems optimized for a fast flow of value & feedback



Business Strategy



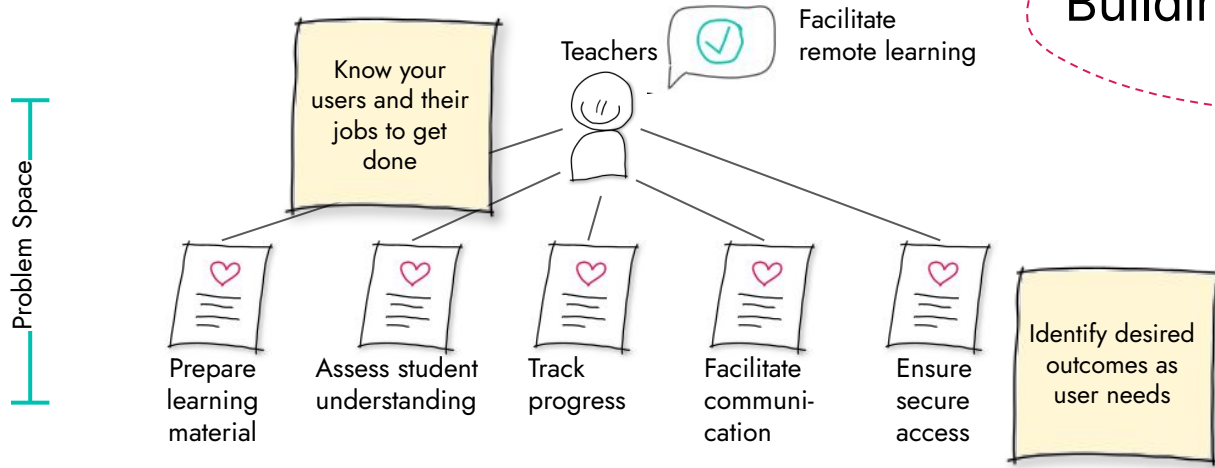
Domain-aligned Software Design



Team Organization

# Starting from the User Perspective

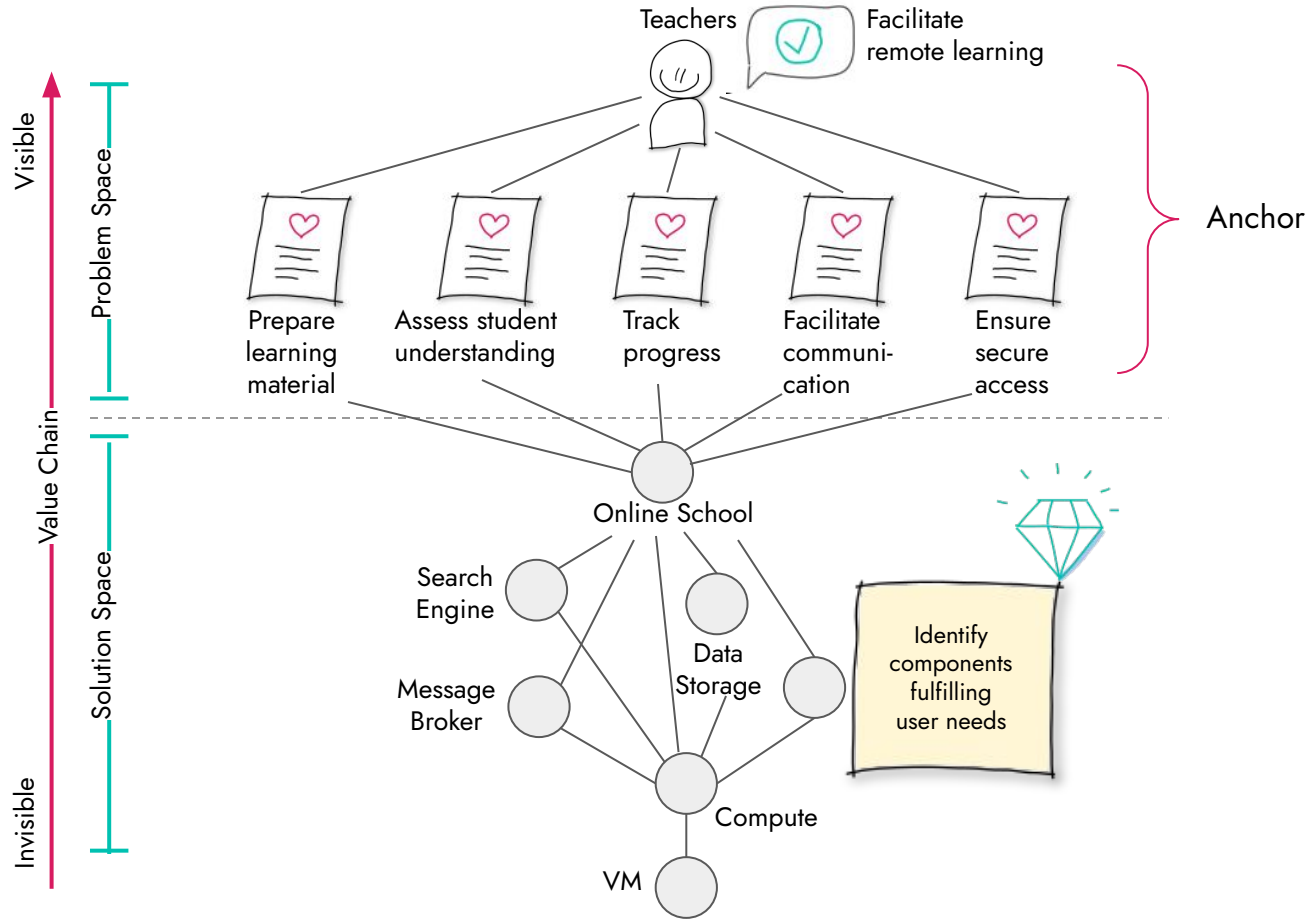
Building the **right** thing



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

Clayton Christensen

# Understanding the Value Chain

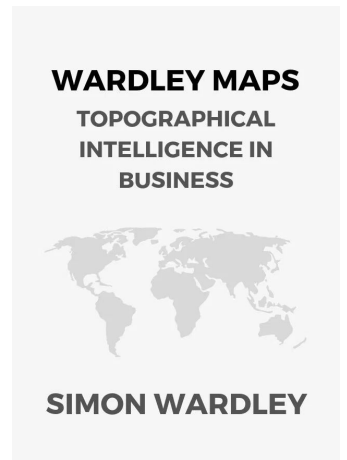
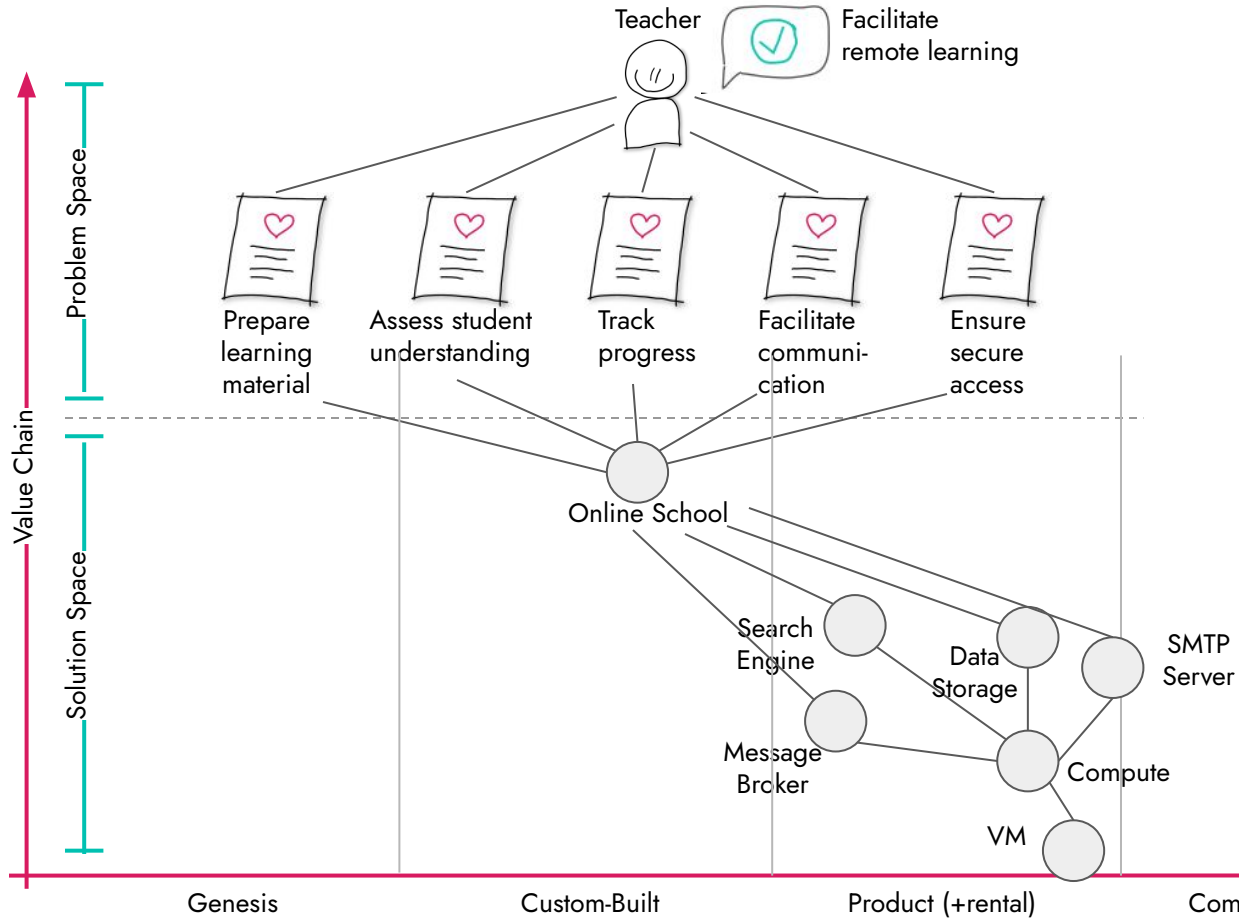


**WARDLEY MAPS**  
TOPOGRAPHICAL  
INTELLIGENCE IN  
BUSINESS



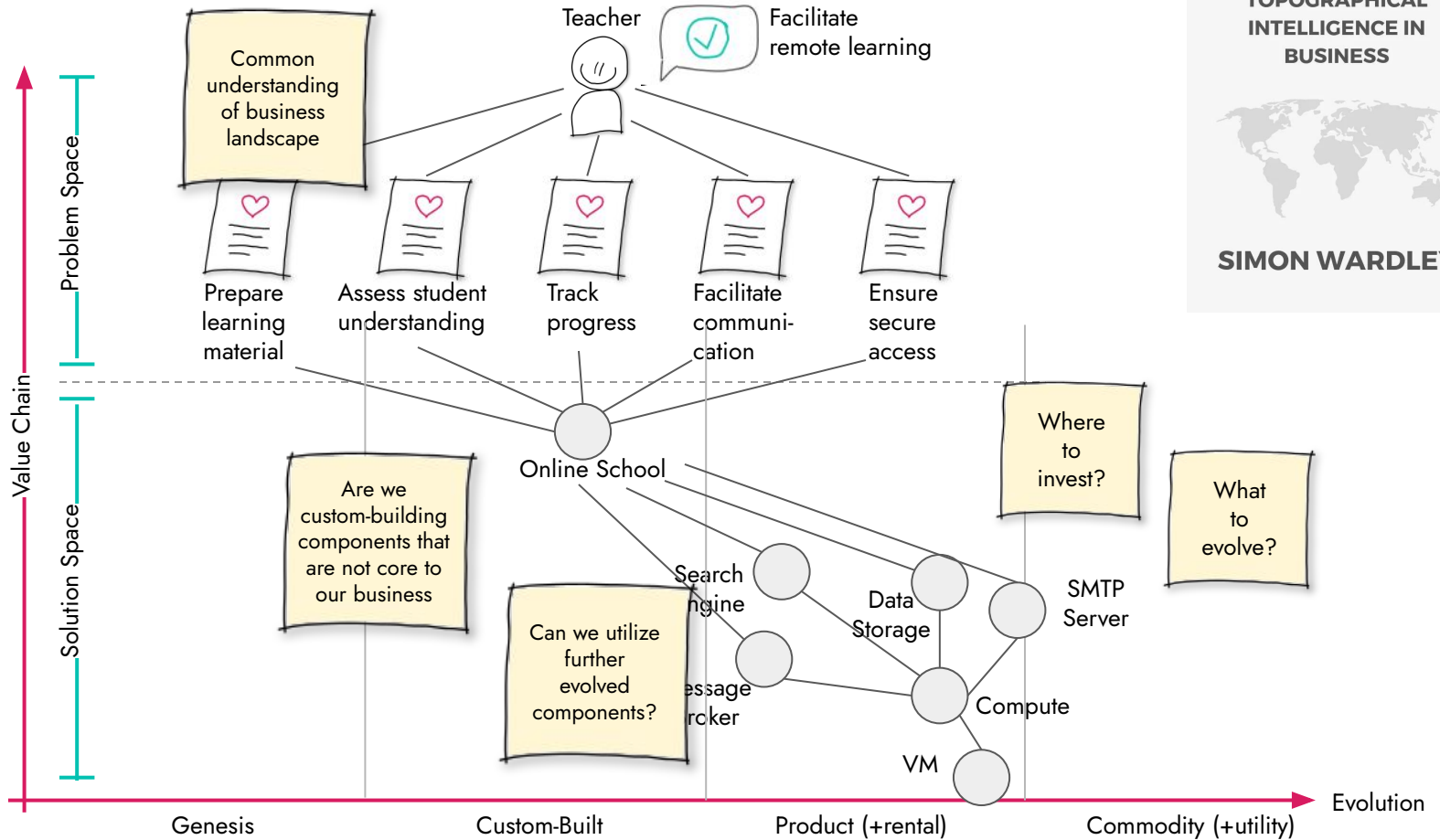
**SIMON WARDLEY**

# Mapping the Current Business Landscape



Mapping components to evolution stages

# Mapping the Current Business Landscape

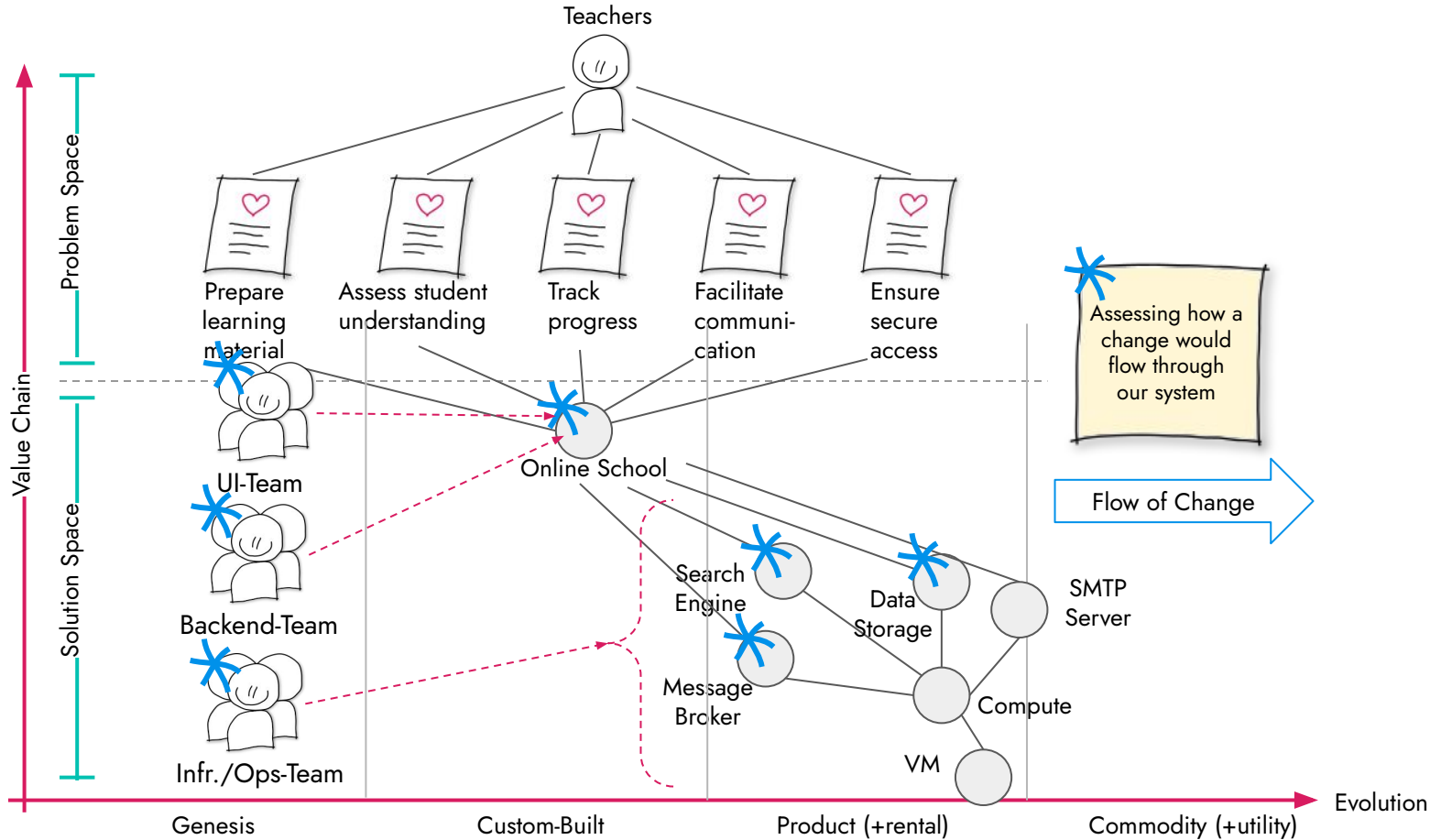


**WARDLEY MAPS**  
TOPOGRAPHICAL  
INTELLIGENCE IN  
BUSINESS

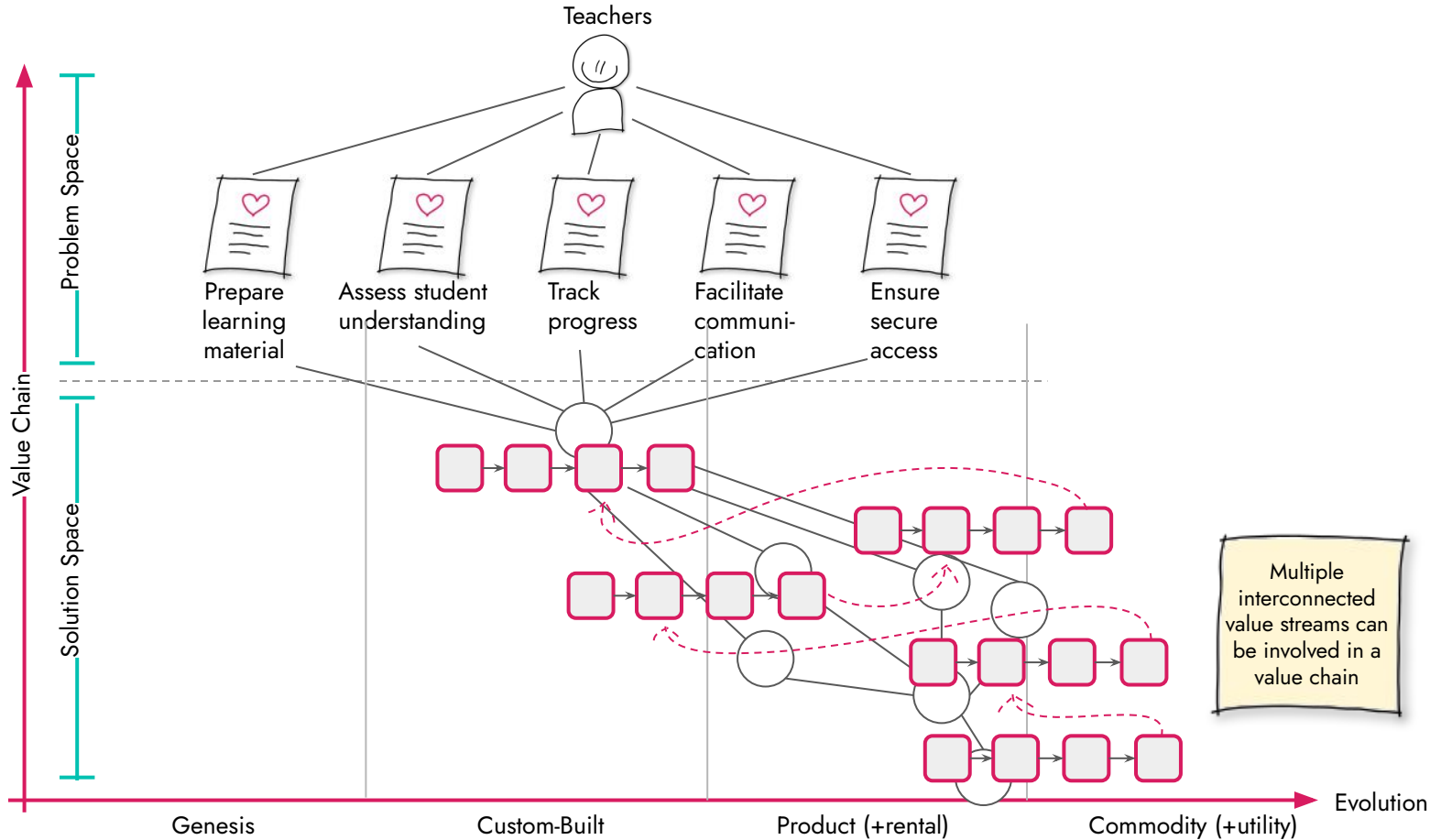


**SIMON WARDLEY**

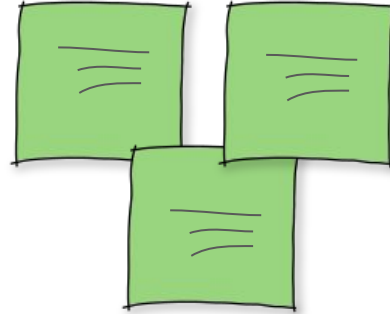
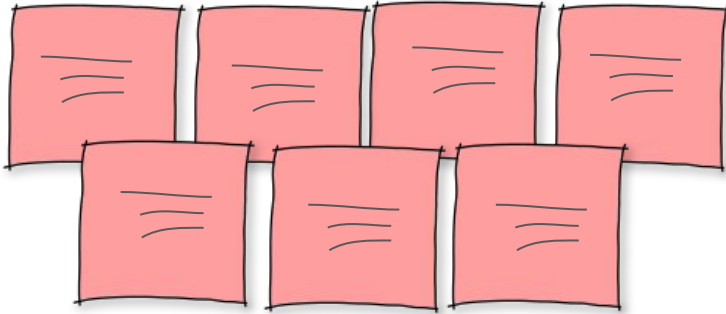
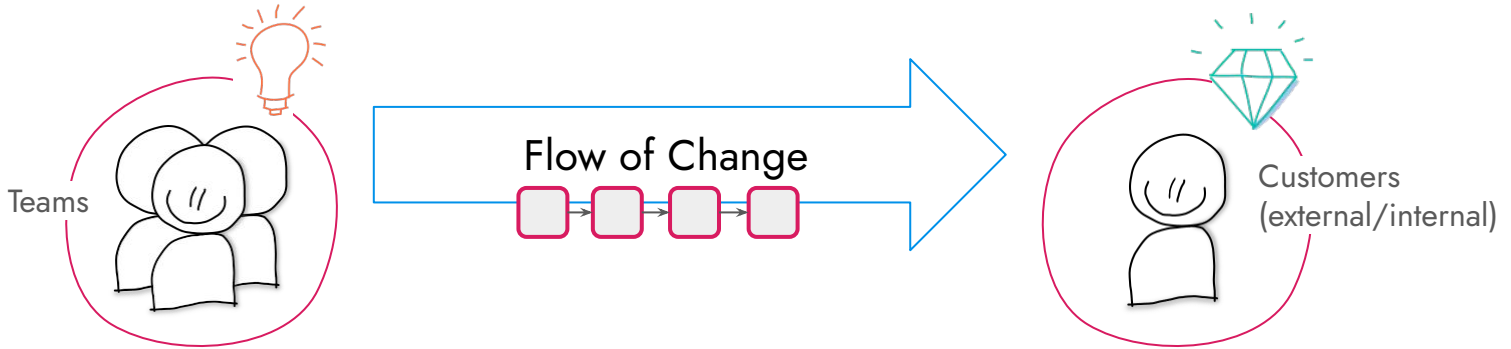
# Assessing Current Flow of Change



# Assessing Current Flow of Change



# Assessing Current Flow of Change



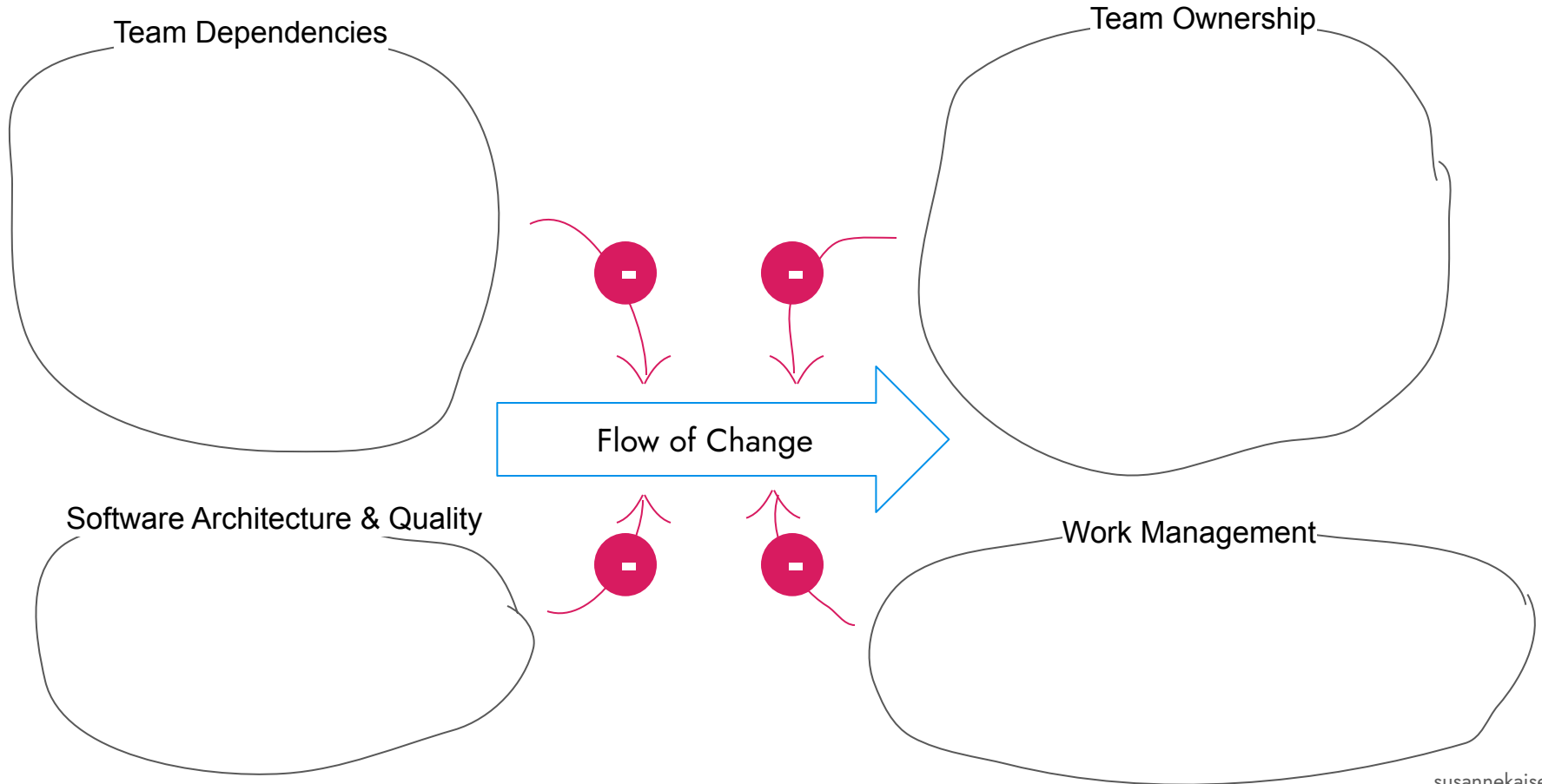
What blocks the current flow?

What should be minimized?

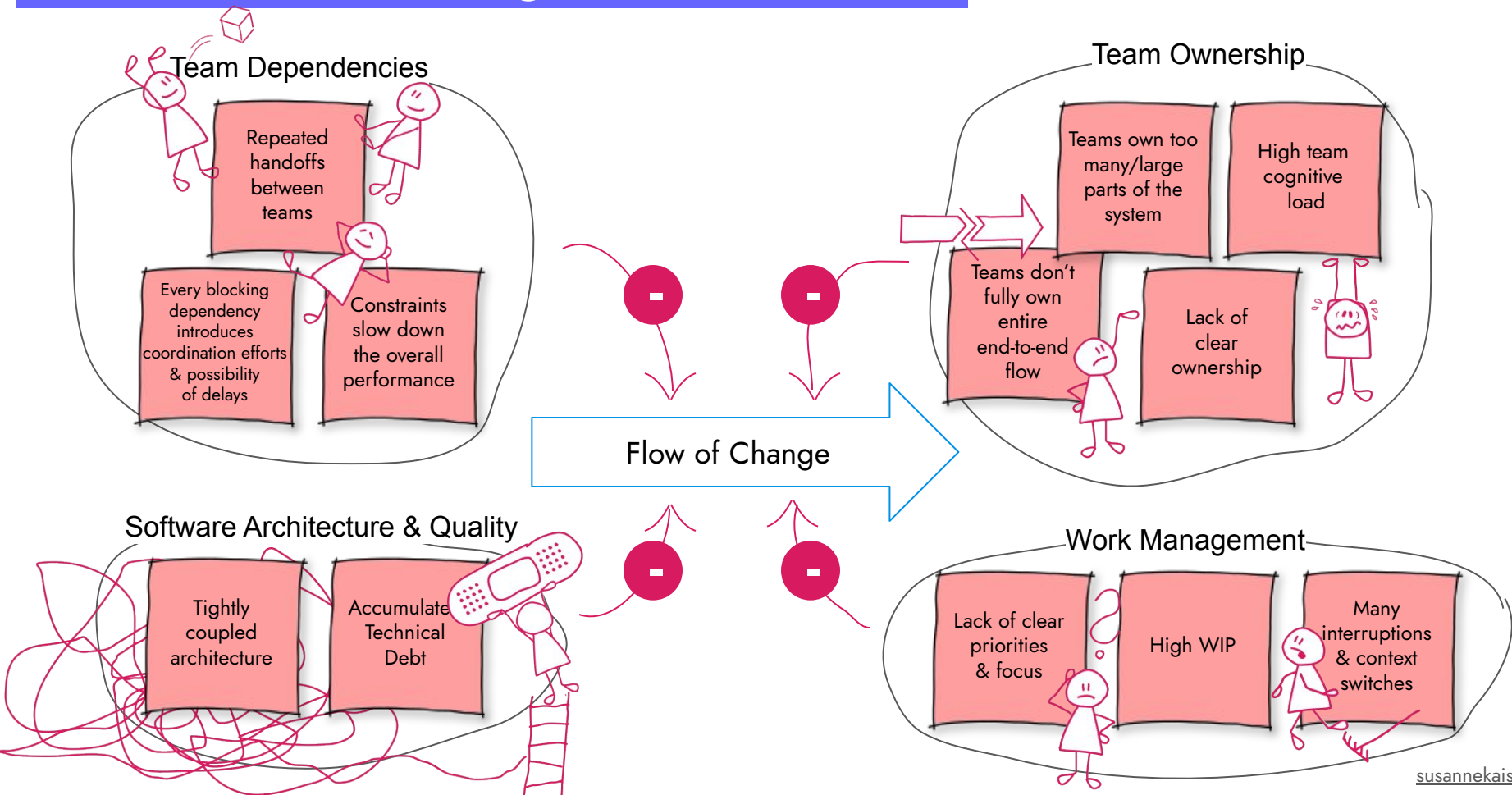
What works well in the flow?

What should be kept?

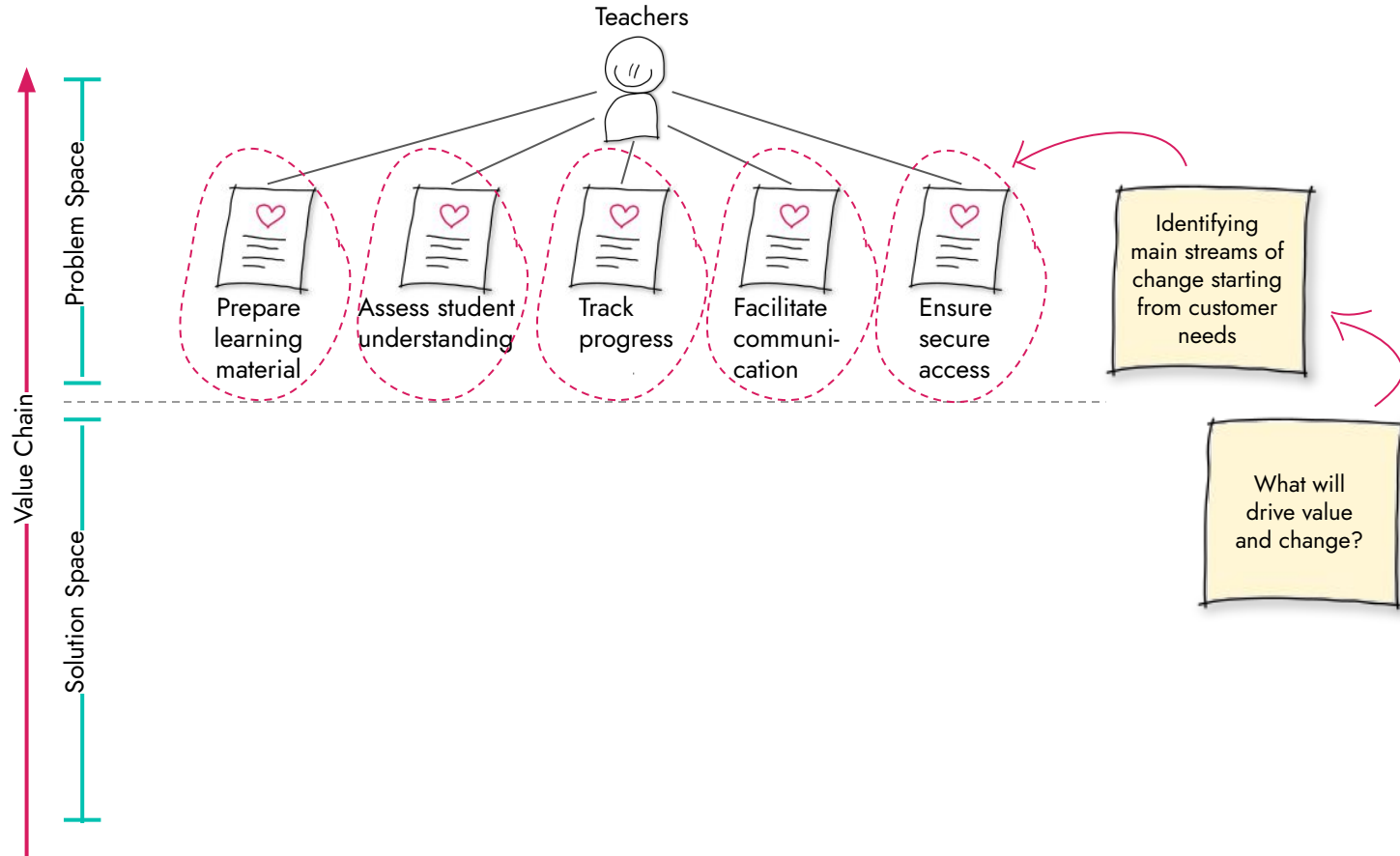
# What is Preventing Flow? (Examples)



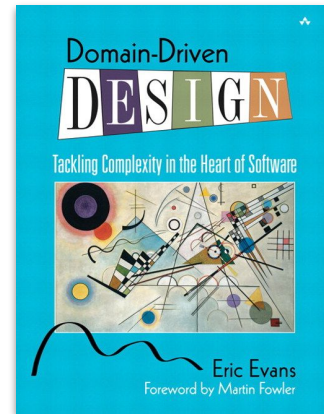
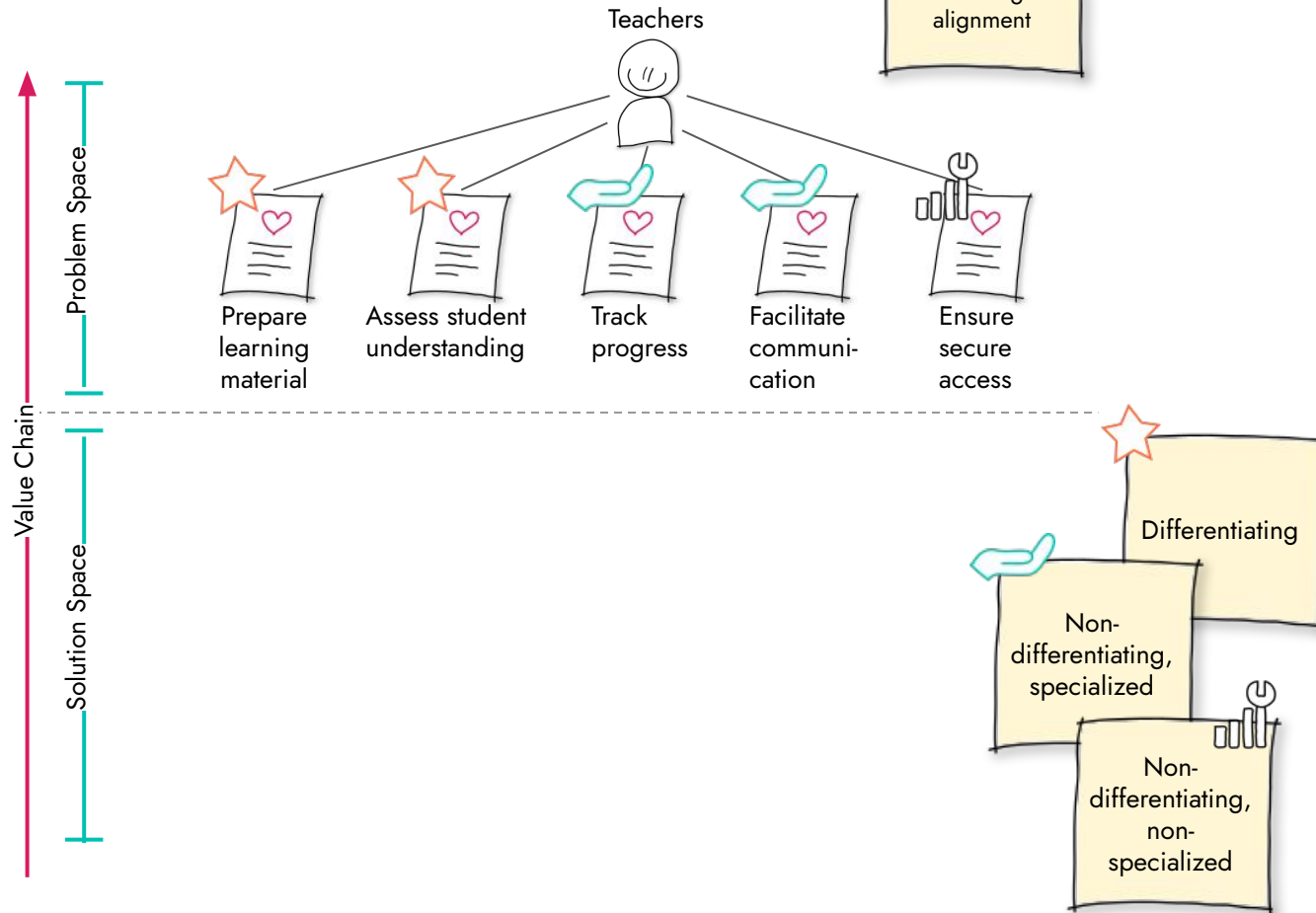
# What is Preventing Flow? (Examples)



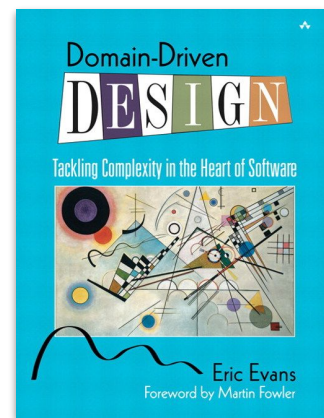
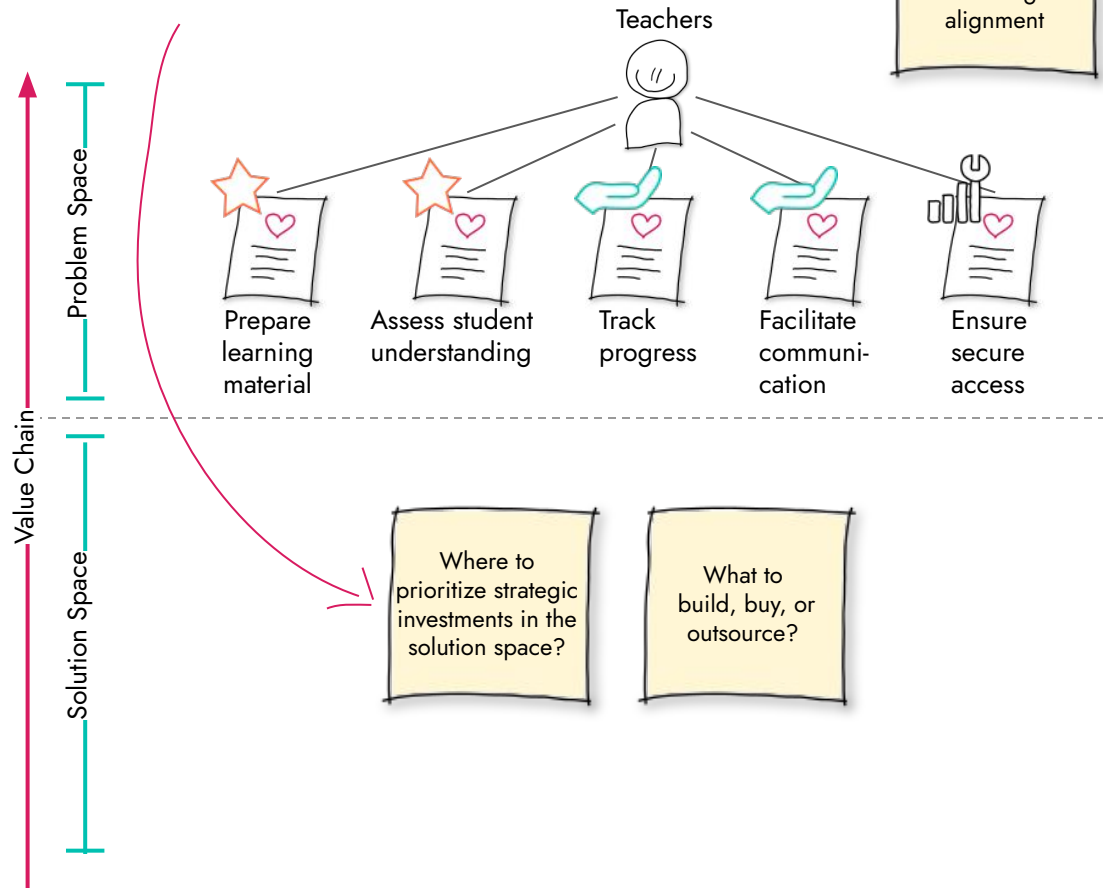
# Identifying Streams of Change



# Where to Invest?

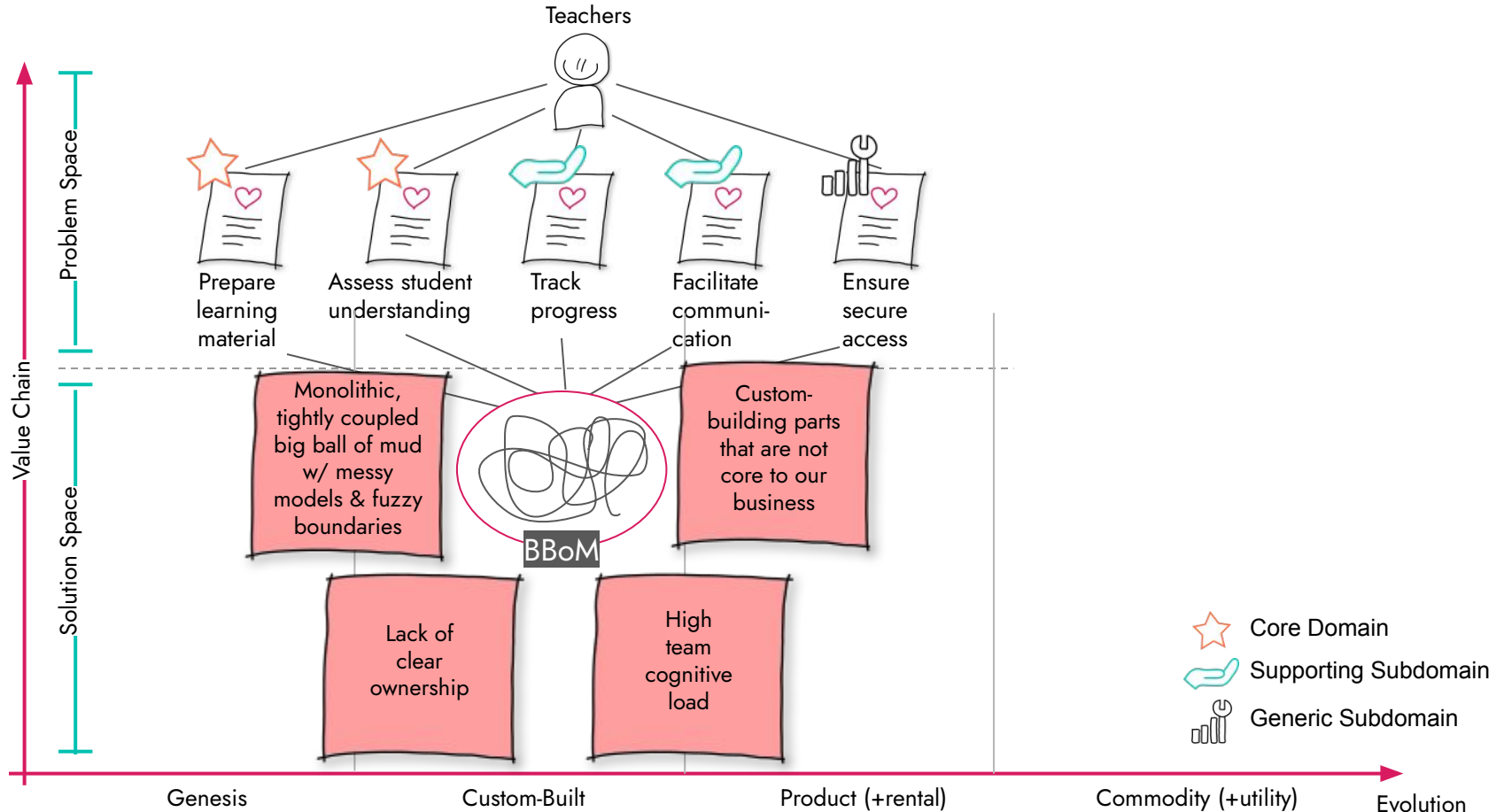


# Where to Invest?

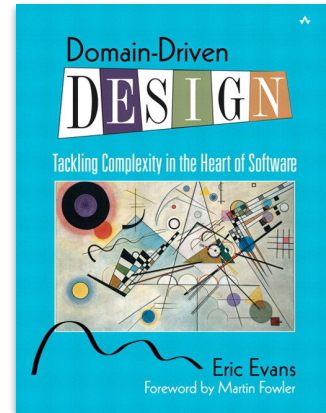
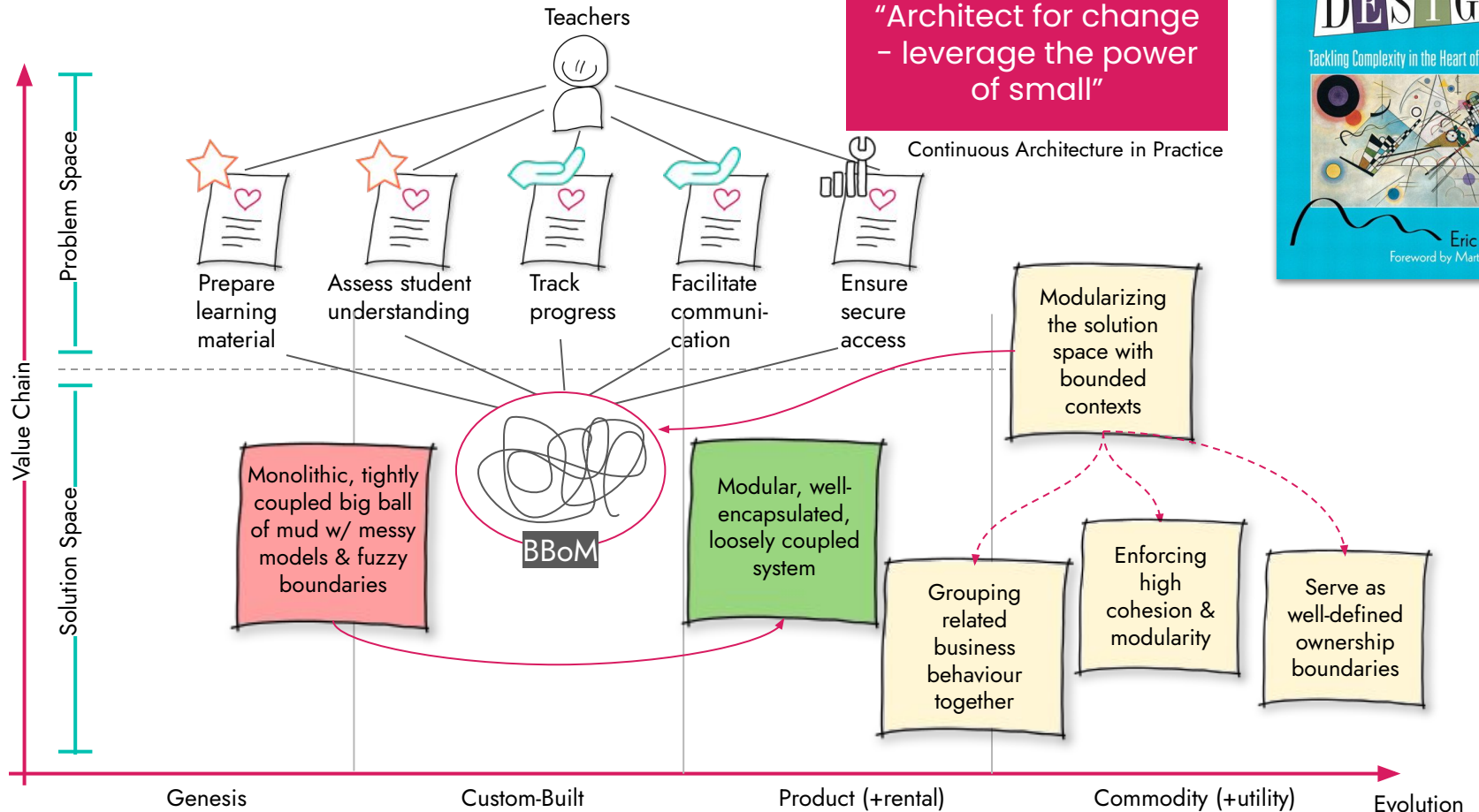


- ☆ Core Domain
- 👉 Supporting Subdomain
- 📊 Generic Subdomain

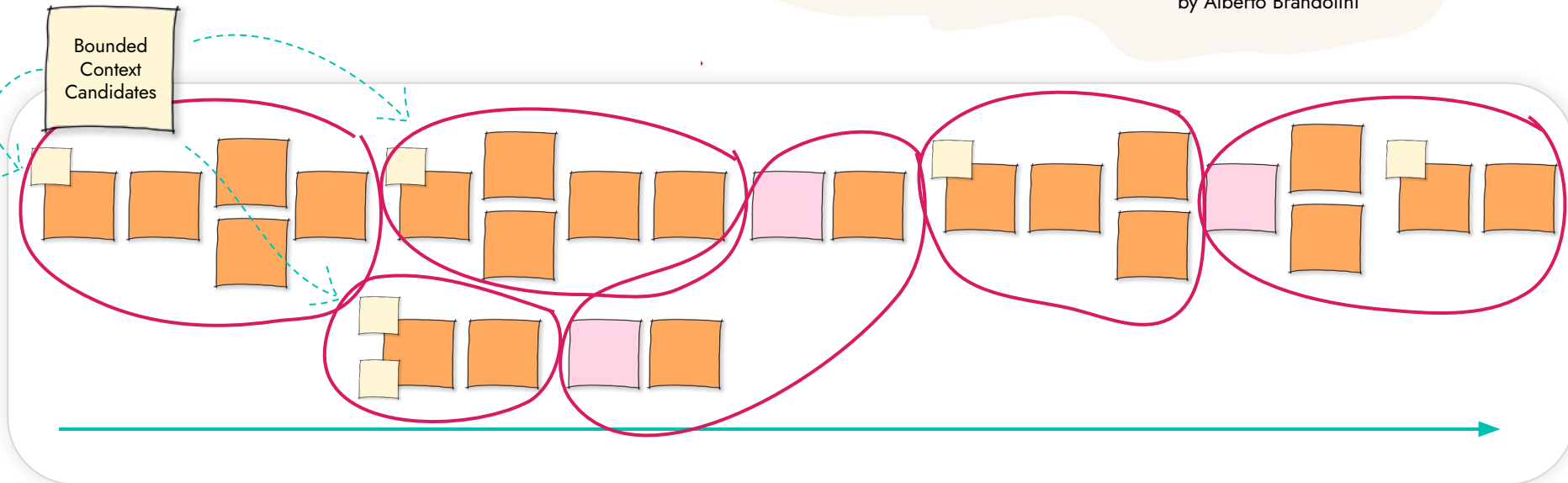
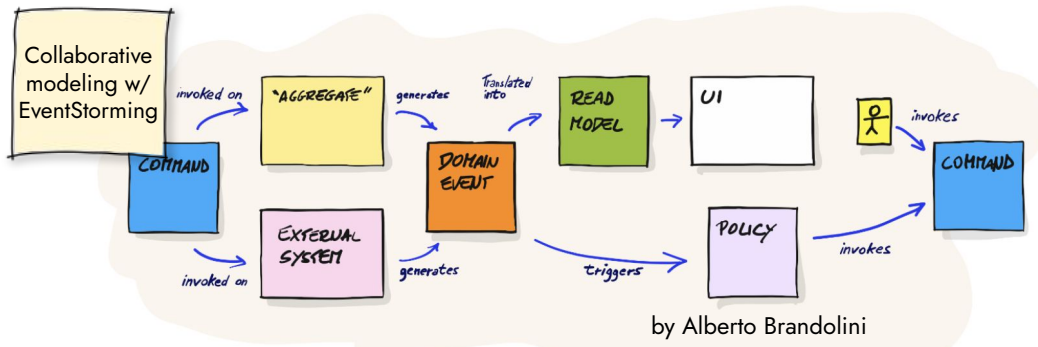
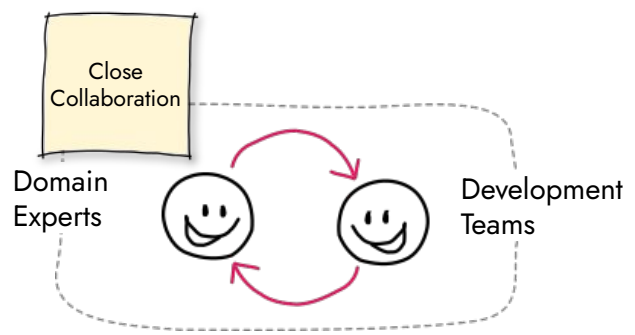
# Modularizing the Solution Space



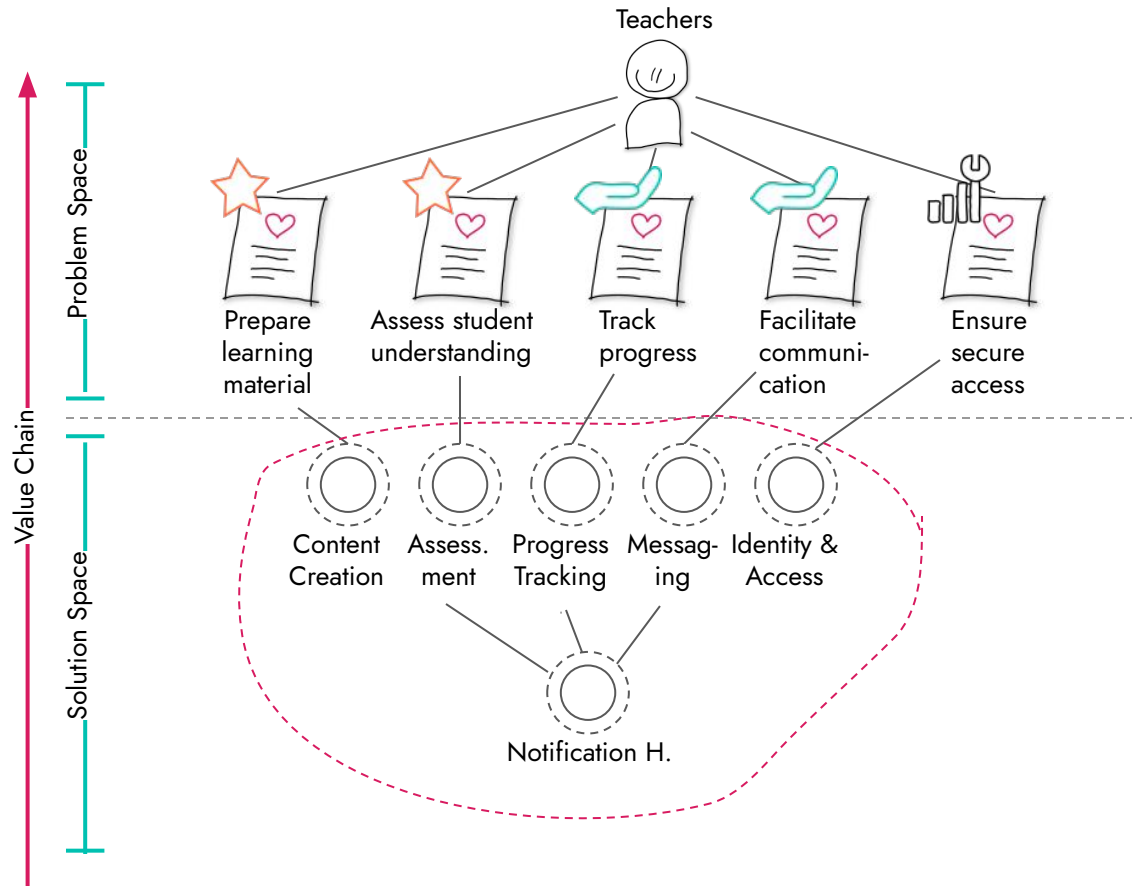
# Modularizing the Solution Space







# Modularizing the Solution Space

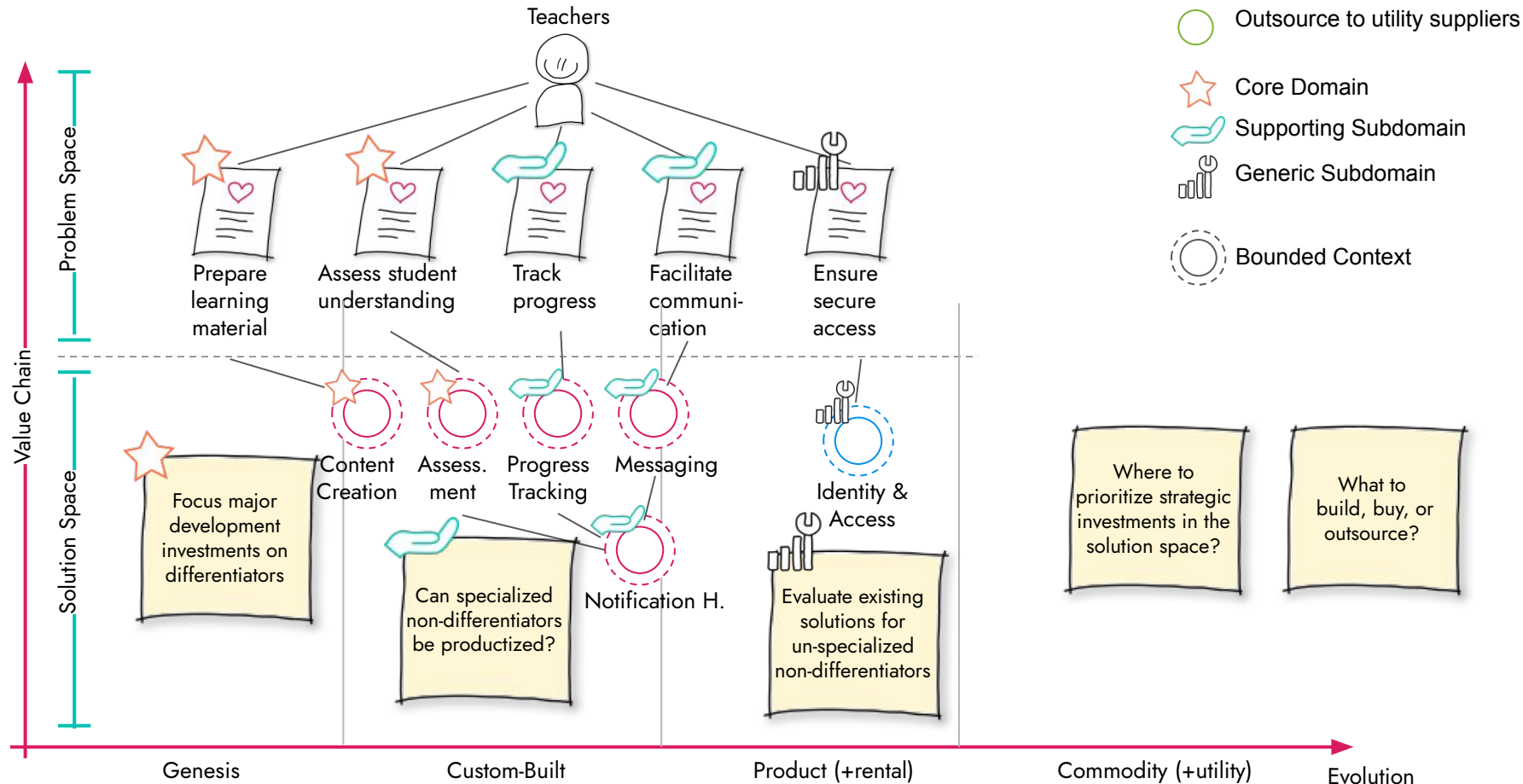


# Envisioning the Future Landscape

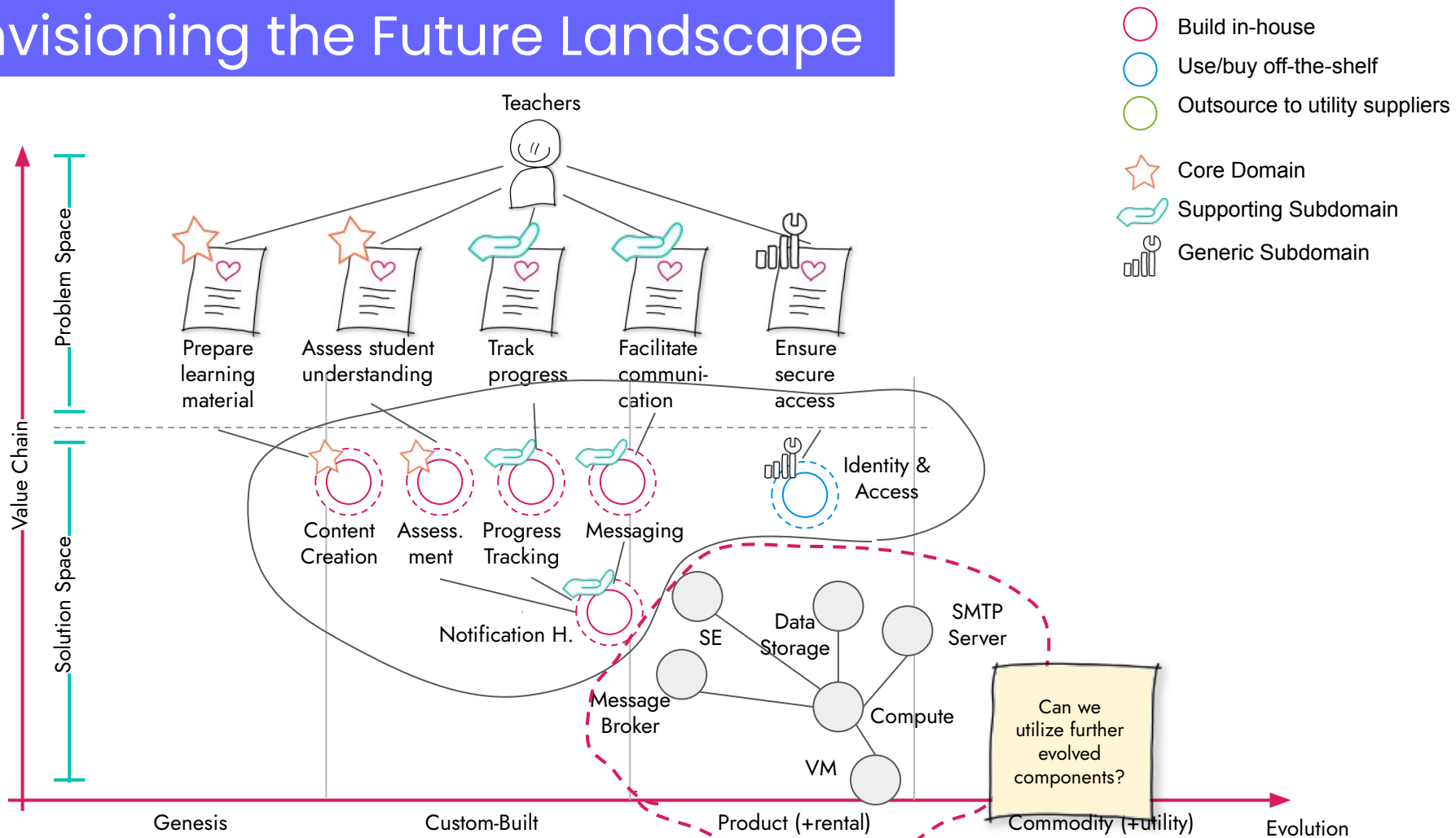


-  Core Domain
-  Supporting Subdomain
-  Generic Subdomain
-  Bounded Context

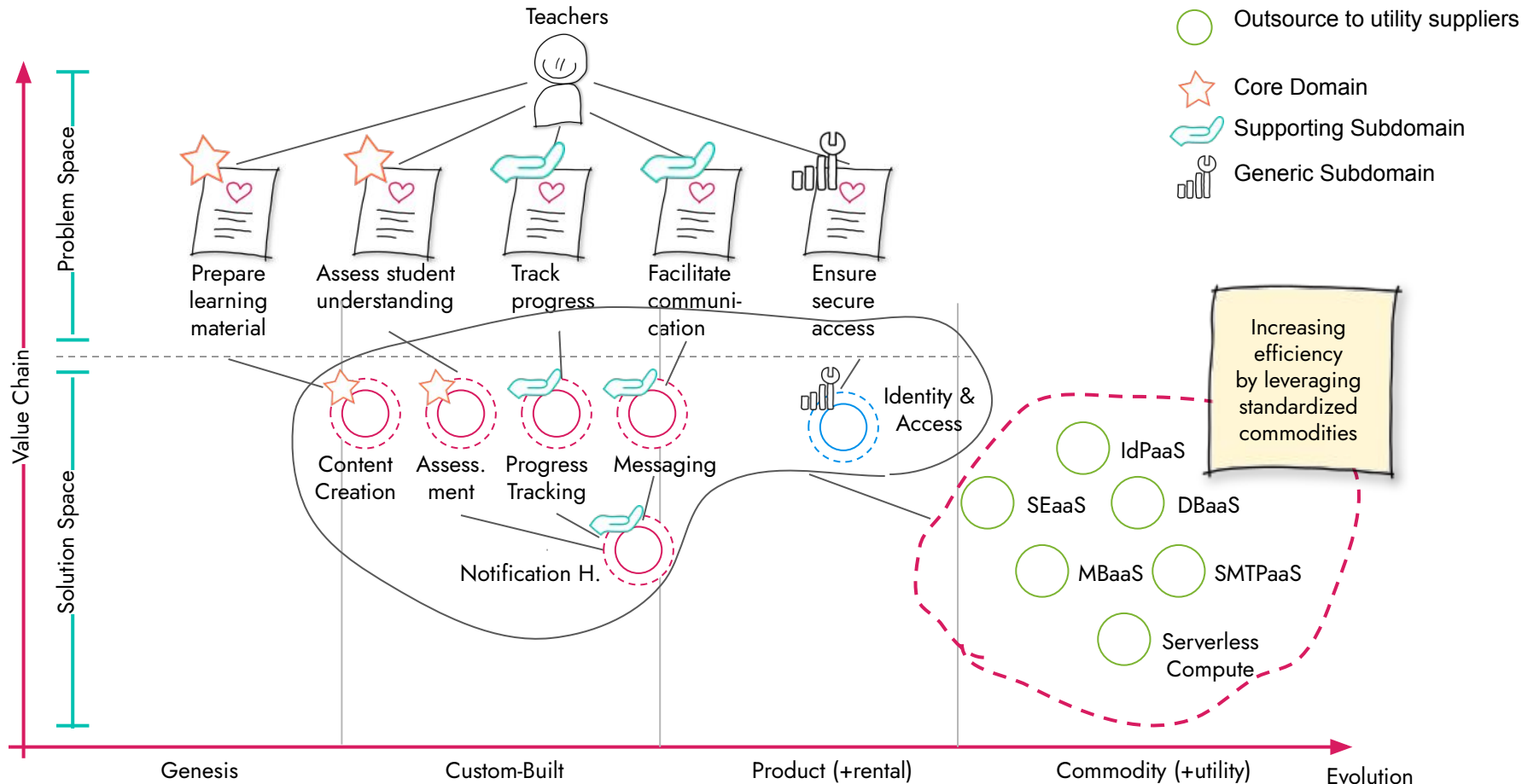
# Envisioning the Future Landscape



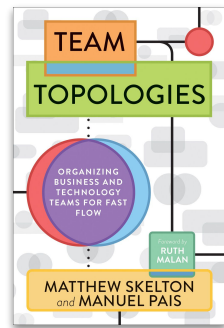
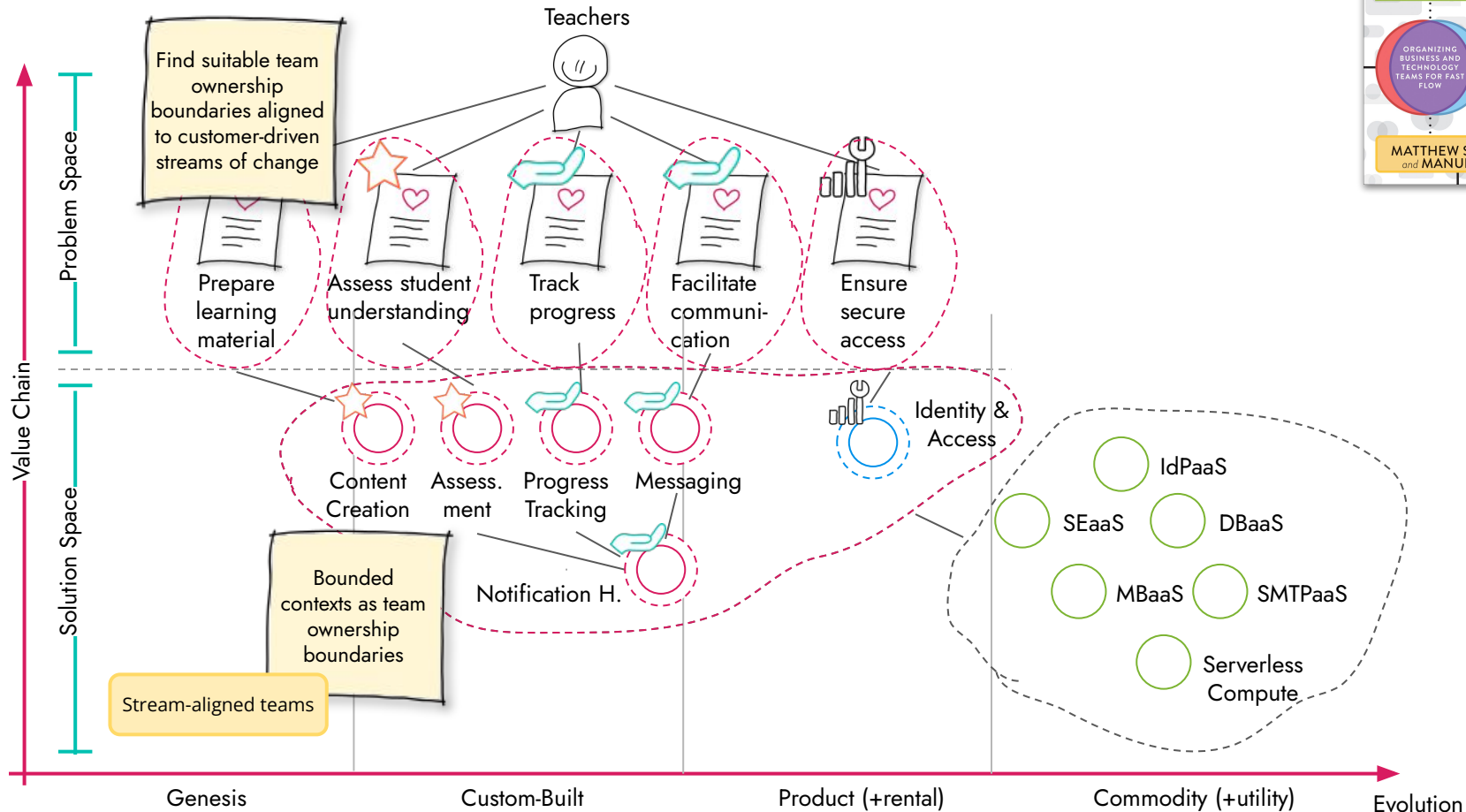
# Envisioning the Future Landscape



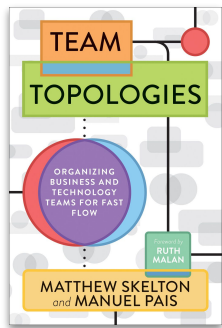
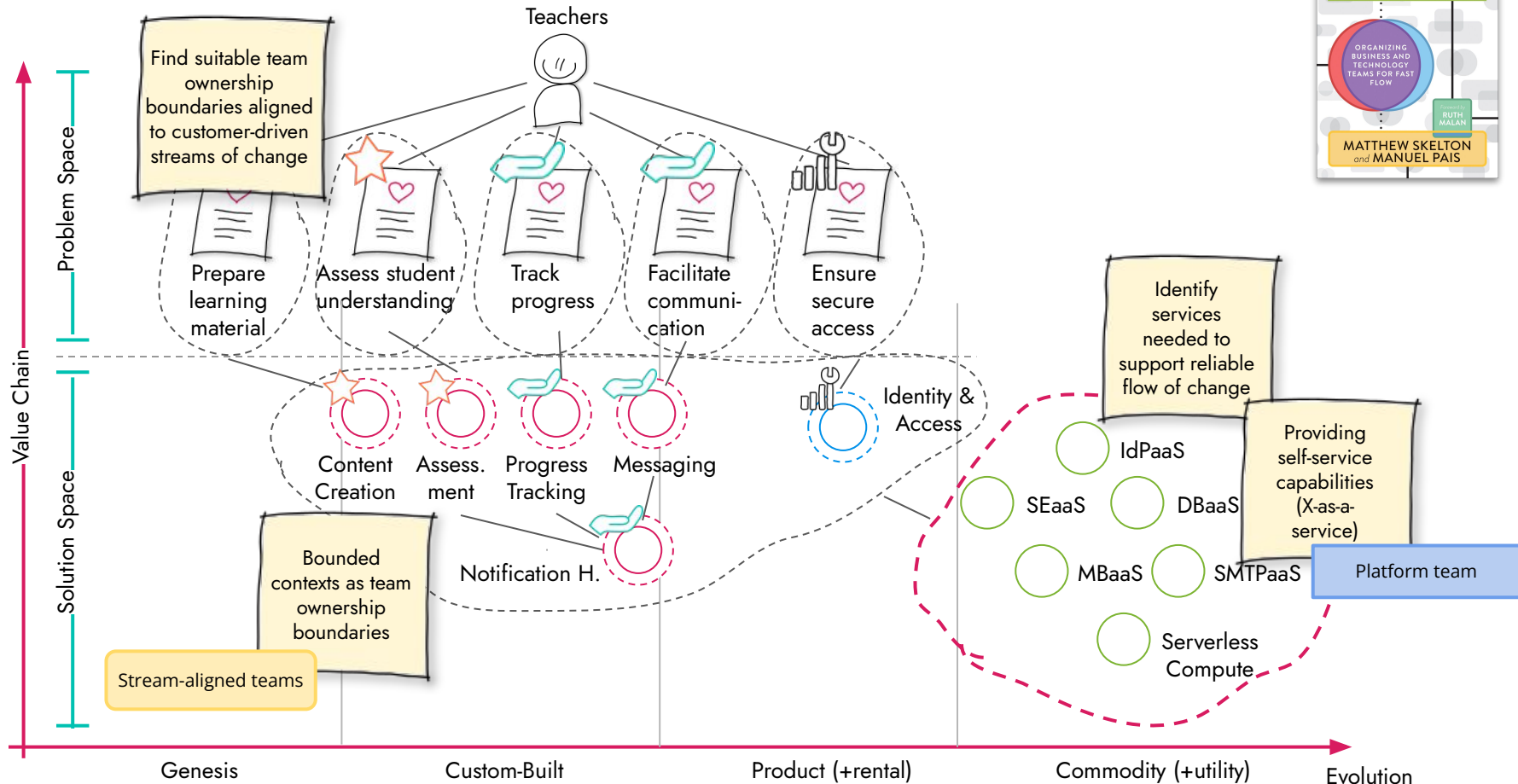
# Envisioning the Future Landscape



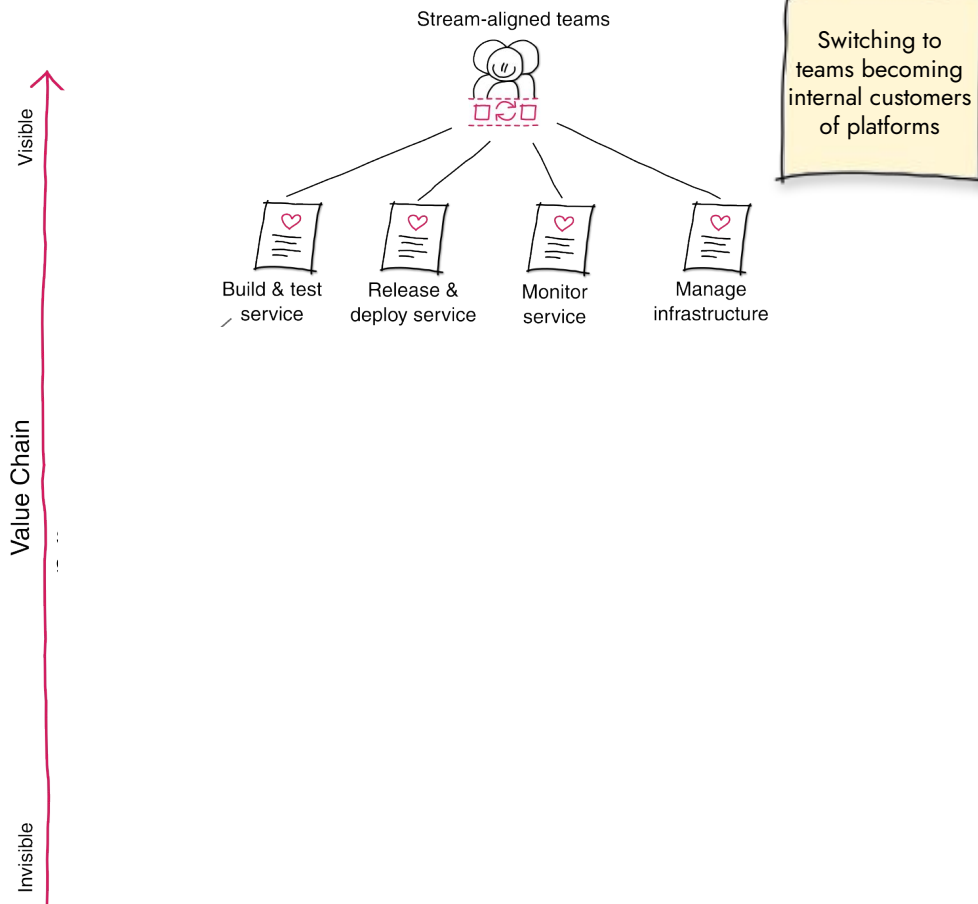
# Aligning Teams



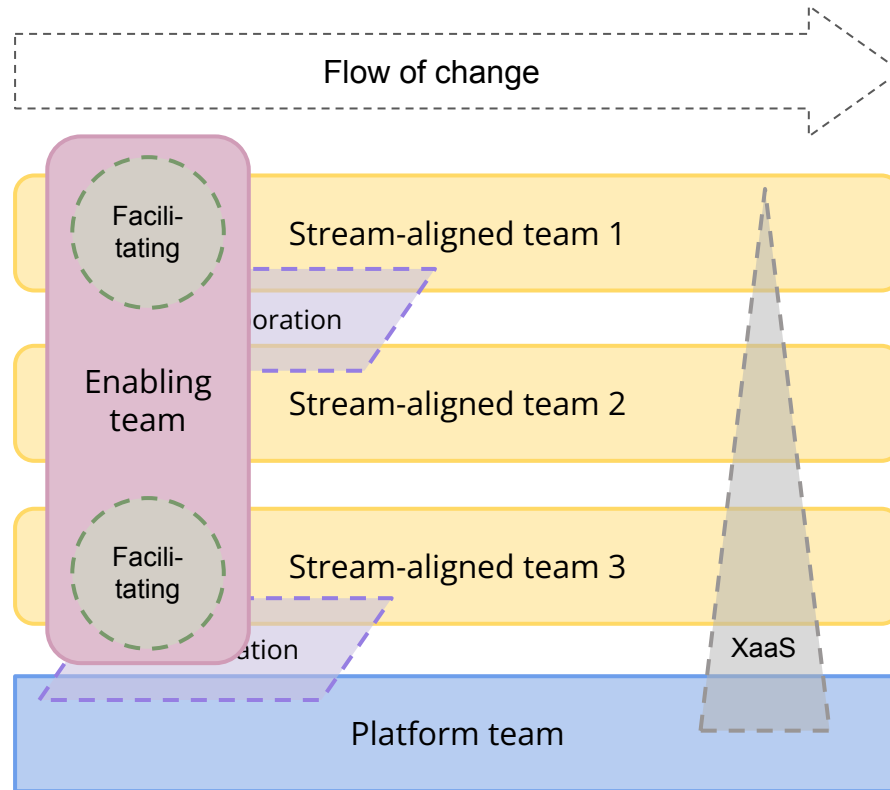
# Aligning Teams



# Identifying Platform Candidates



# Evolving Team Interactions



# Architecture for Flow Canvas

START  
AS-IS

1

## Current Issues & Why of Missing

What are the current issues (problems)?  
What are the reasons of the current issues?  
What are the current issues?  
What are the current issues (problems)?  
What are the current issues (problems)?  
What are the current issues (problems)?

2

## Current Flow

What are the current flows?

What are the current flows?



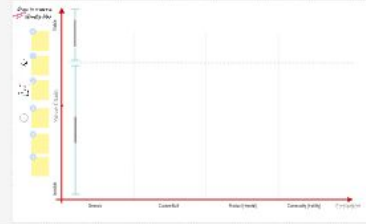
Flow of Changes / Wave

3

## Current Business Landscape

Visualizing the business landscape with Viability Maps

What are the current business landscapes?



4

## Comparing the Problem Space

Comparing the Problem Space

What are the current business landscapes?



5

## Viability in the Solution Space

Comparing solution space (design decisions)

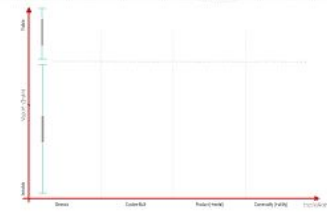


6

## Future Business Landscapes & Resilient Controls

Visualizing the future business landscape with Viability Maps

What are the future business landscapes?

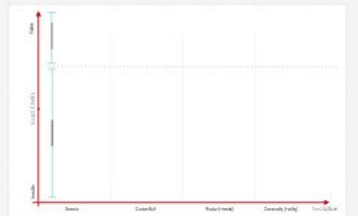


7

## Future Team Operating Boundaries

Identifying future team operating boundaries

What are the future team operating boundaries?



8

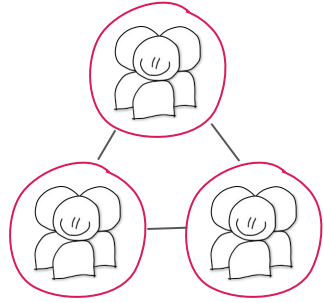
## Future Team Coordination & Interwork Modes

Identifying future team coordination & interwork modes

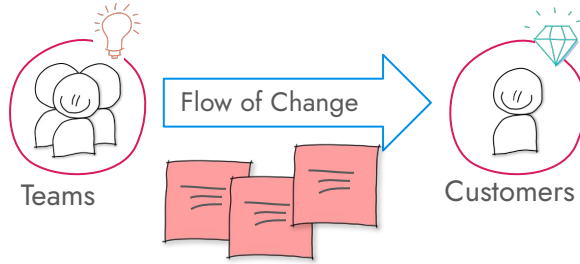
What are the future team coordination & interwork modes?



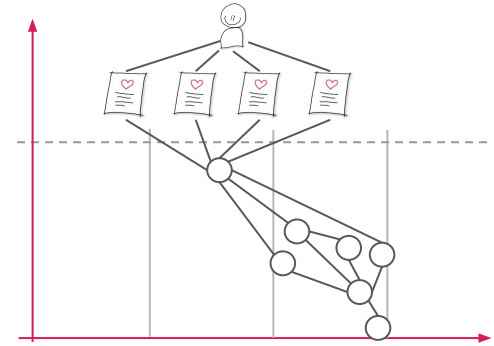
# Assessing the Current State



Analyzing Current Teams & Dependencies



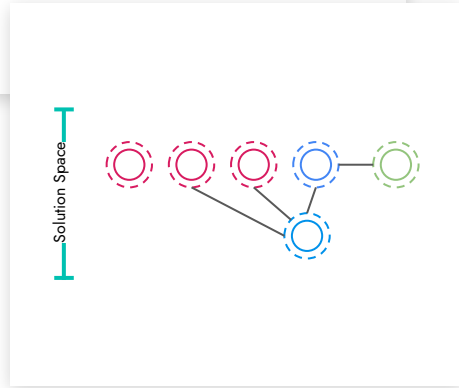
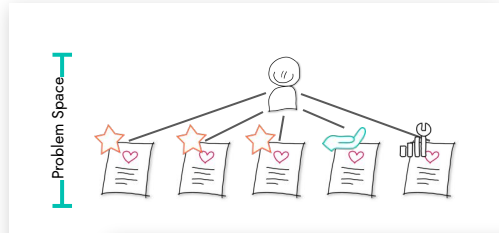
Assessing Current Flow of Change



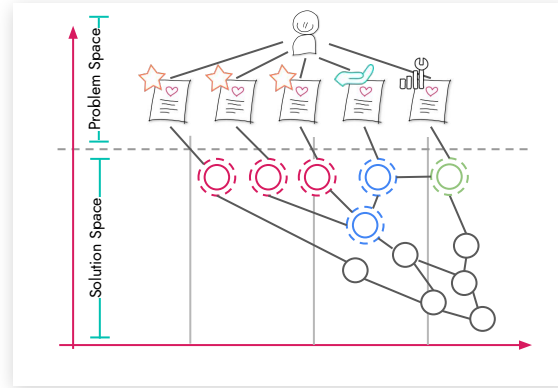
Mapping the Current Business Landscape

# Designing the Ideal Future as First Work Assumption

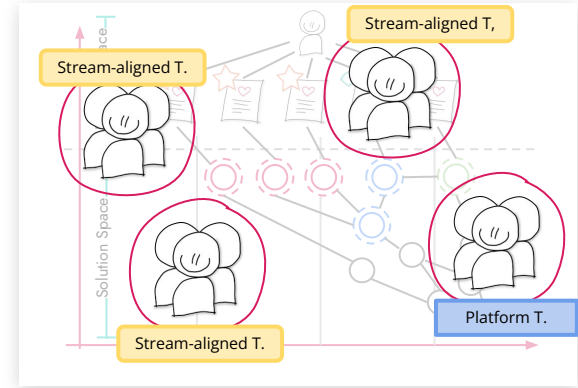
## Categorizing the Problem Space



Modularizing the Solution Space

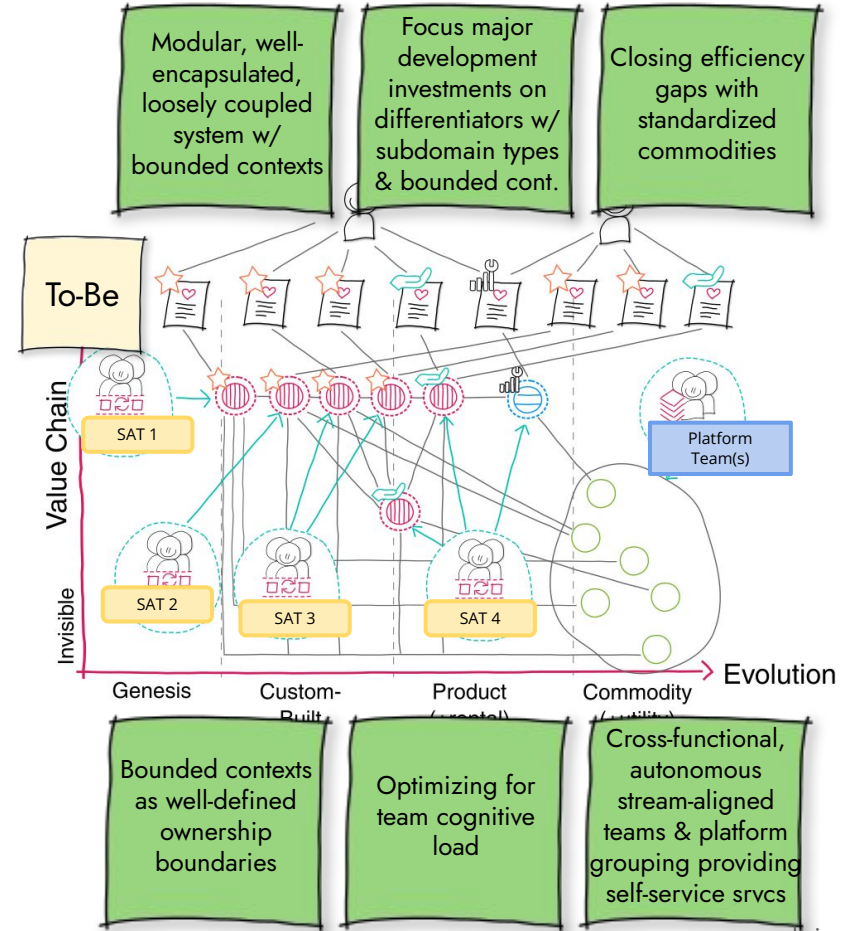
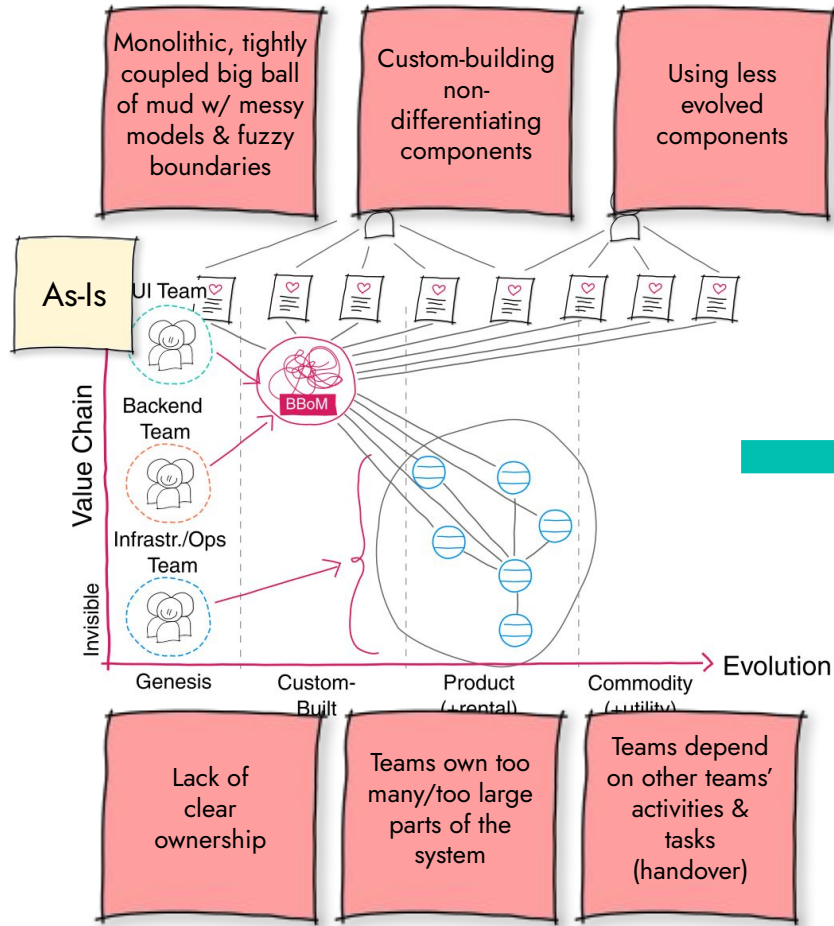


Envisioning the Future Landscape



Aligning Future Teams & Interactions

# Unlocking Blockers to Flow



# Key Success Factors

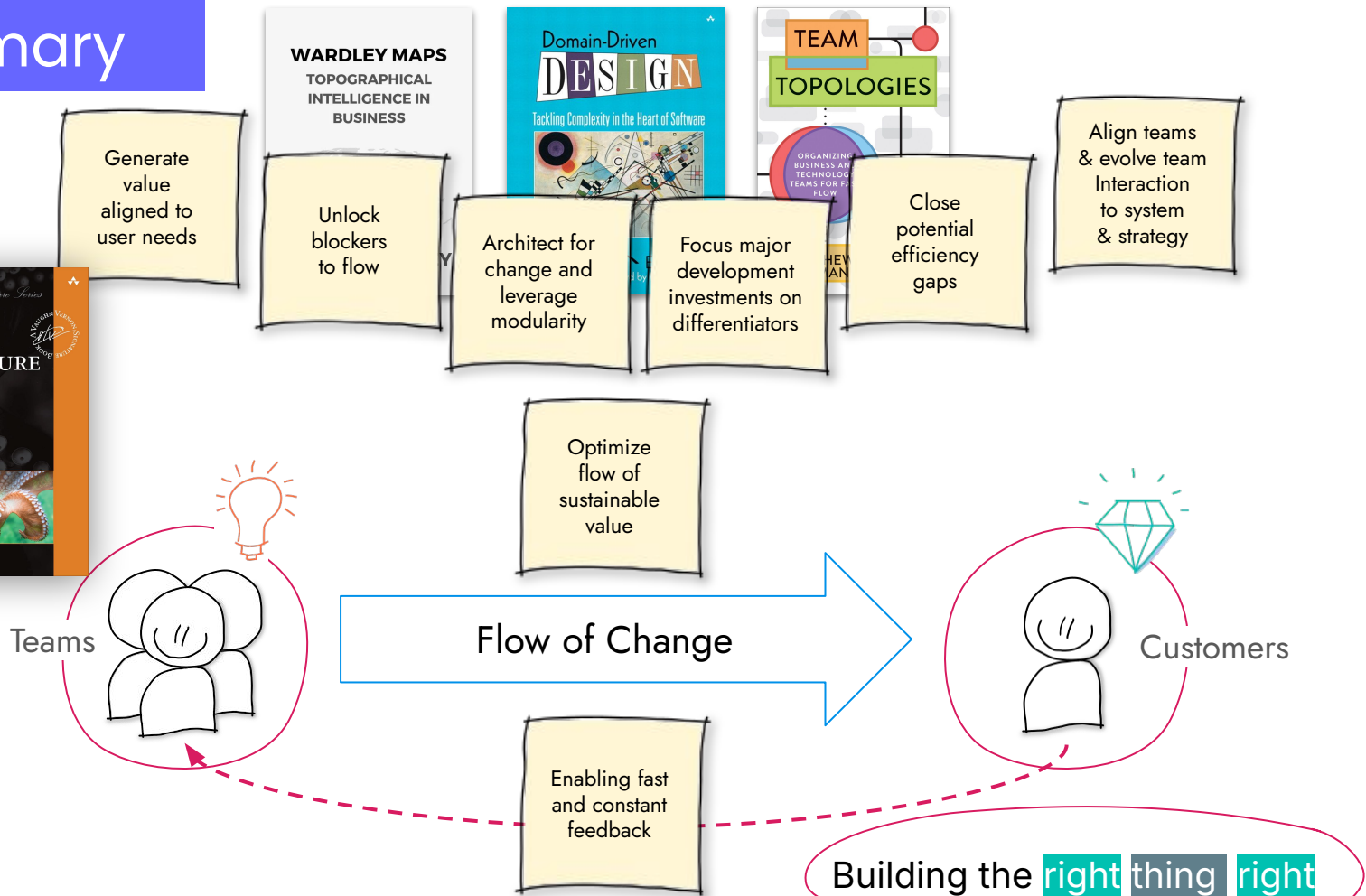
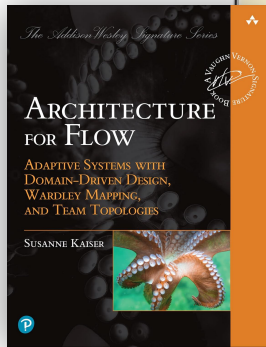
- Communicating reasoning of movement
- Deferring team assignment decisions
- Support from leadership
- Early adopters and advocates
- Early involvement of teams
- Incremental evolutionary approach
- Small steps with early feedback



No silver bullet!

Adapt these principles to your specific context, culture and challenges

# Summary



# Thank you!

Susanne Kaiser

Independent Tech Consultant  
Author of "Architecture for Flow"

<https://susannekaiser.net>

<https://linked.in/suksr>

<https://architectureforflow.com>

