

Adaptive, Socio-Technical Systems w/ Architecture for Flow

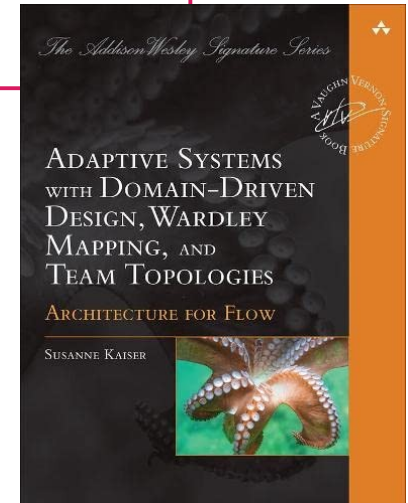
Susanne Kaiser
Independent Tech Consultant
@suksr



Warning: May cause information overload

This presentation contains a substantial amount of content. Please be advised that the sheer volume of information may be overwhelming.

At the end of the presentation, a downloadable link to the complete slide deck will be provided for your reference. Additionally, for those interested in an in-depth exploration of the topics covered, I am in the process of writing a book that delves deeper into the subject matter.



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

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Effectiveness

“Doing the wrong thing right is not nearly as good as doing the right thing wrong”

Dr. Russell Ackoff

Building the thing **right**

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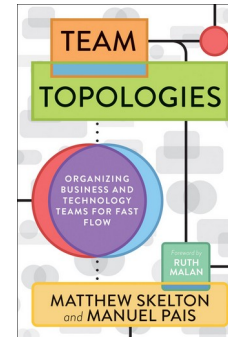
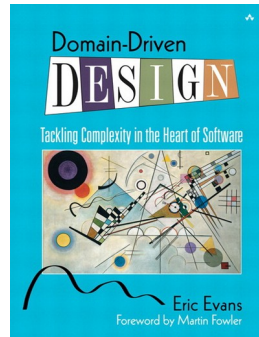
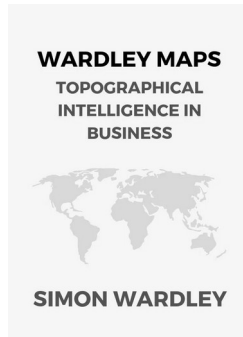
Efficiency

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

John Cutler

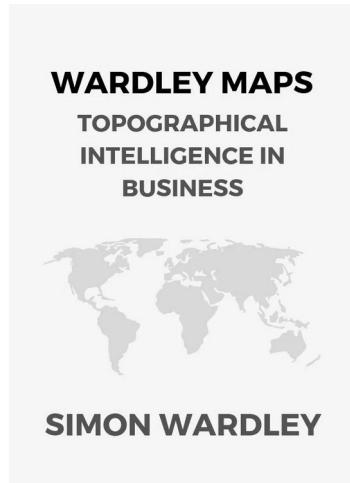
Building the right thing right

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

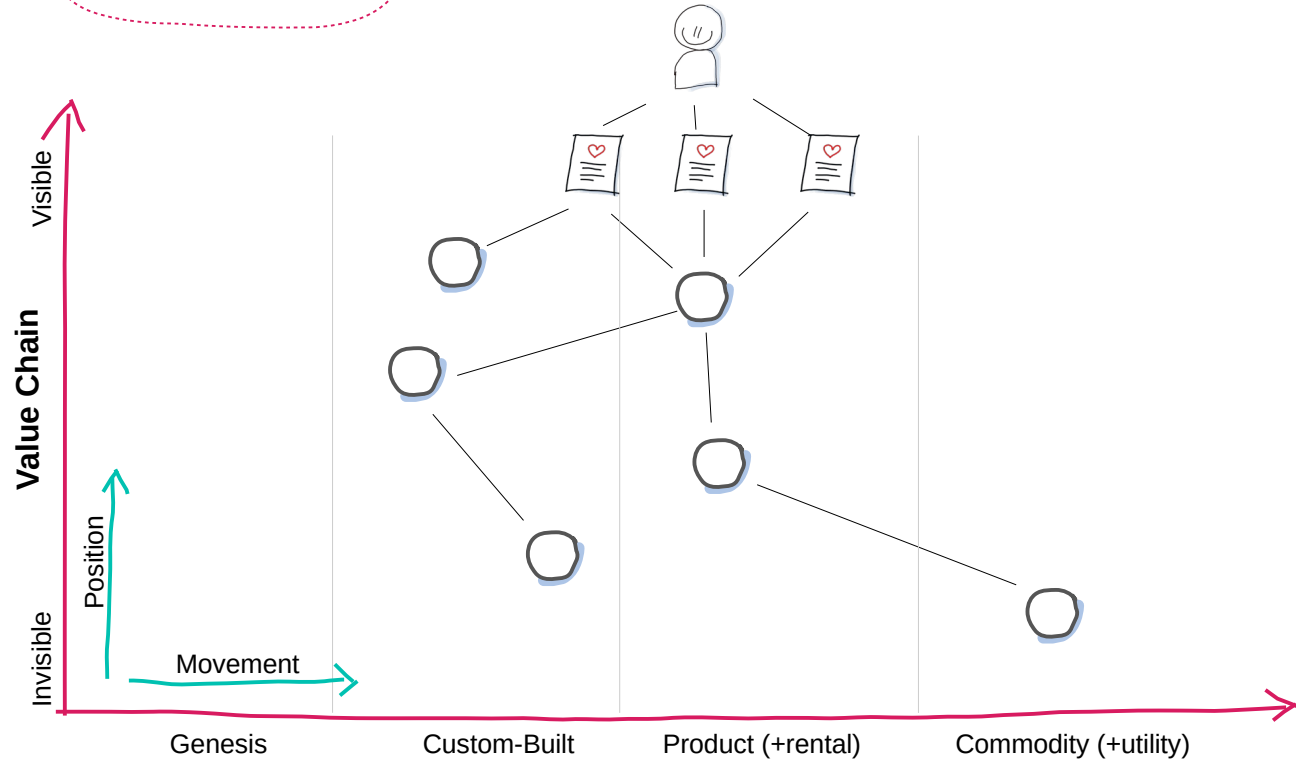


Architecture for Flow

Visualising
the business
landscape



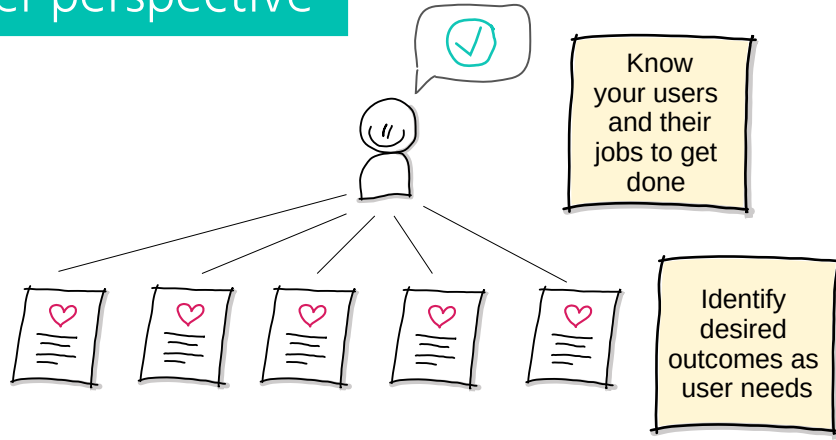
Wardley Map



Starting from the user perspective

Building the
right thing

Problem Space



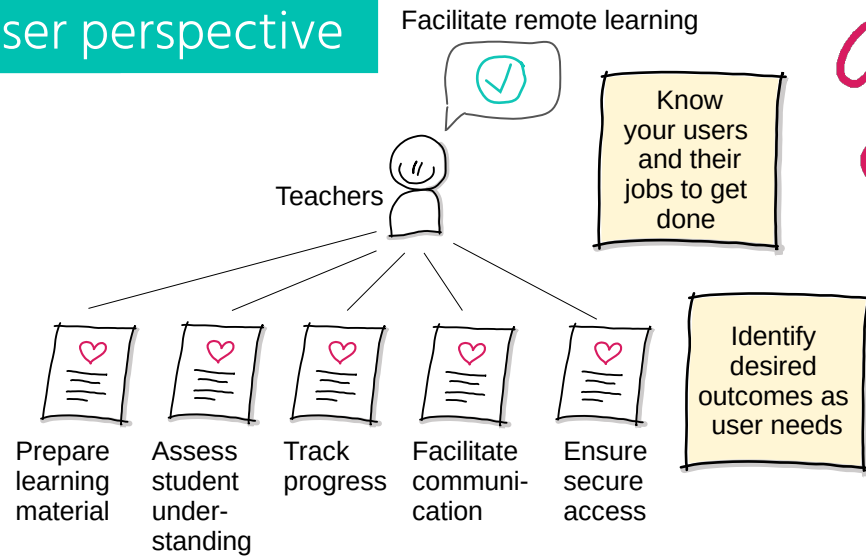
"People buy products and services to get a job done."

Clayton Christensen

Starting from the user perspective

Building the
right thing

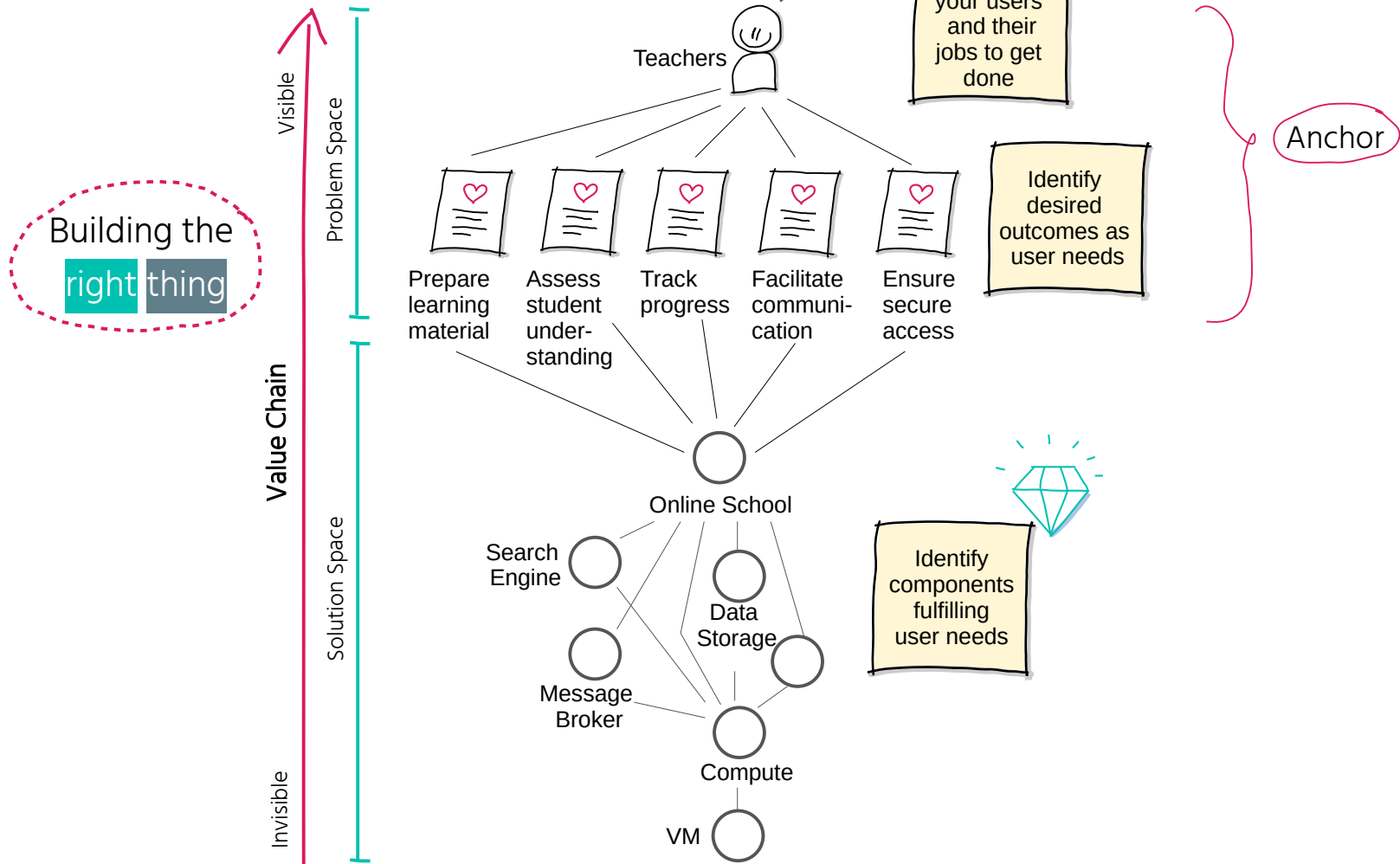
Problem Space



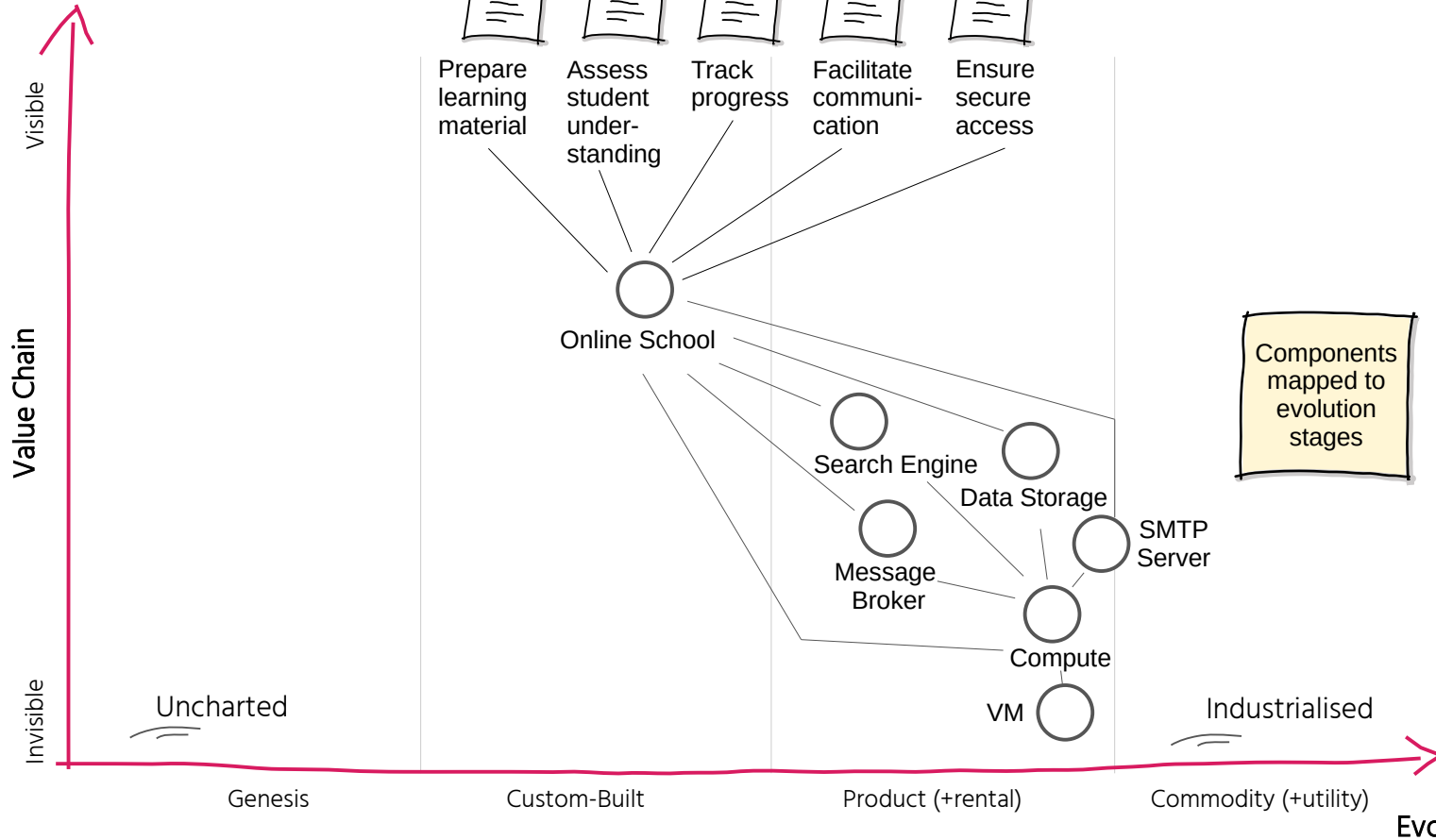
Online School



Understanding the value chain



Mapping the Current State

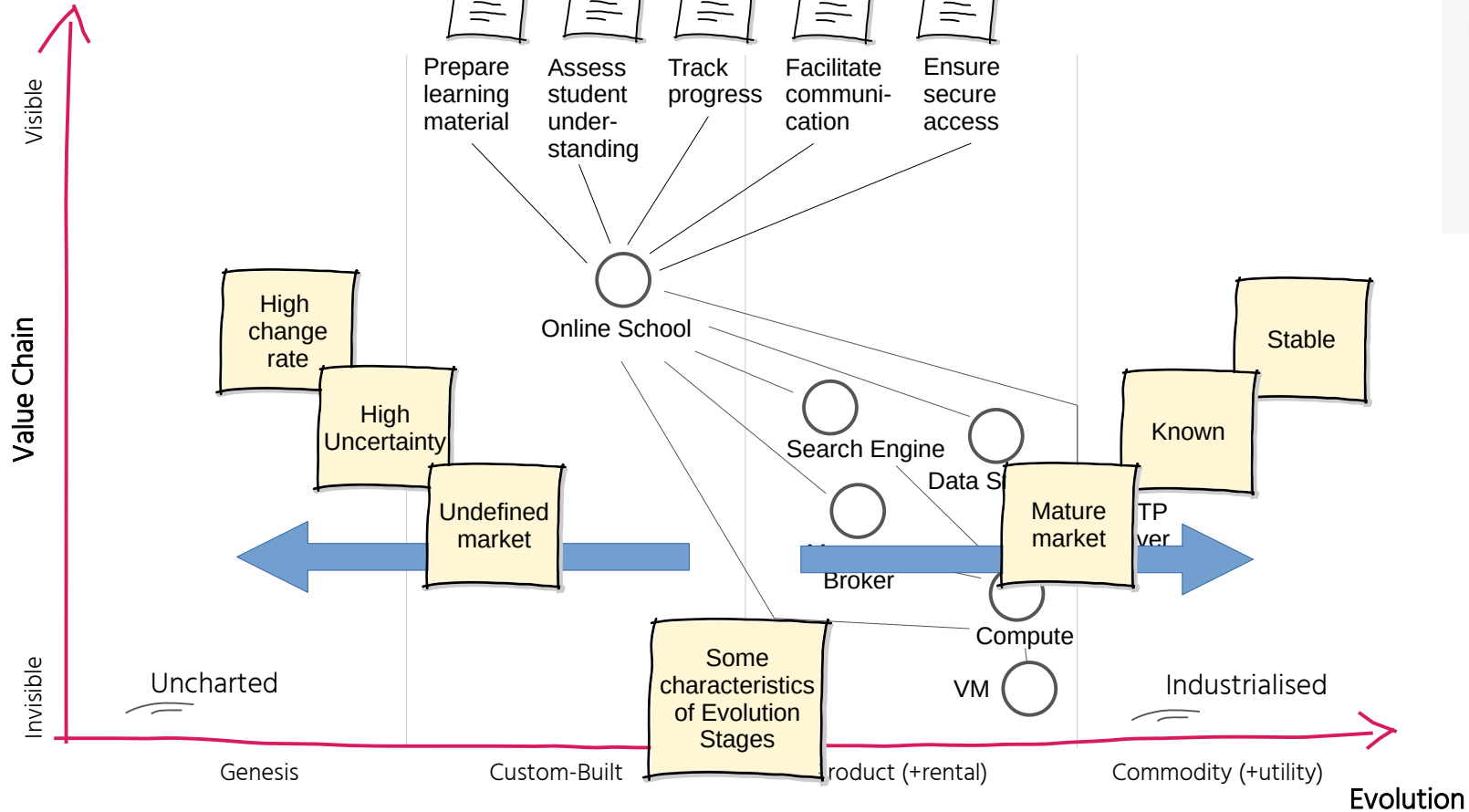


WARDLEY MAPS
TOPOGRAPHICAL
INTELLIGENCE IN
BUSINESS



SIMON WARDLEY

Mapping the Current State

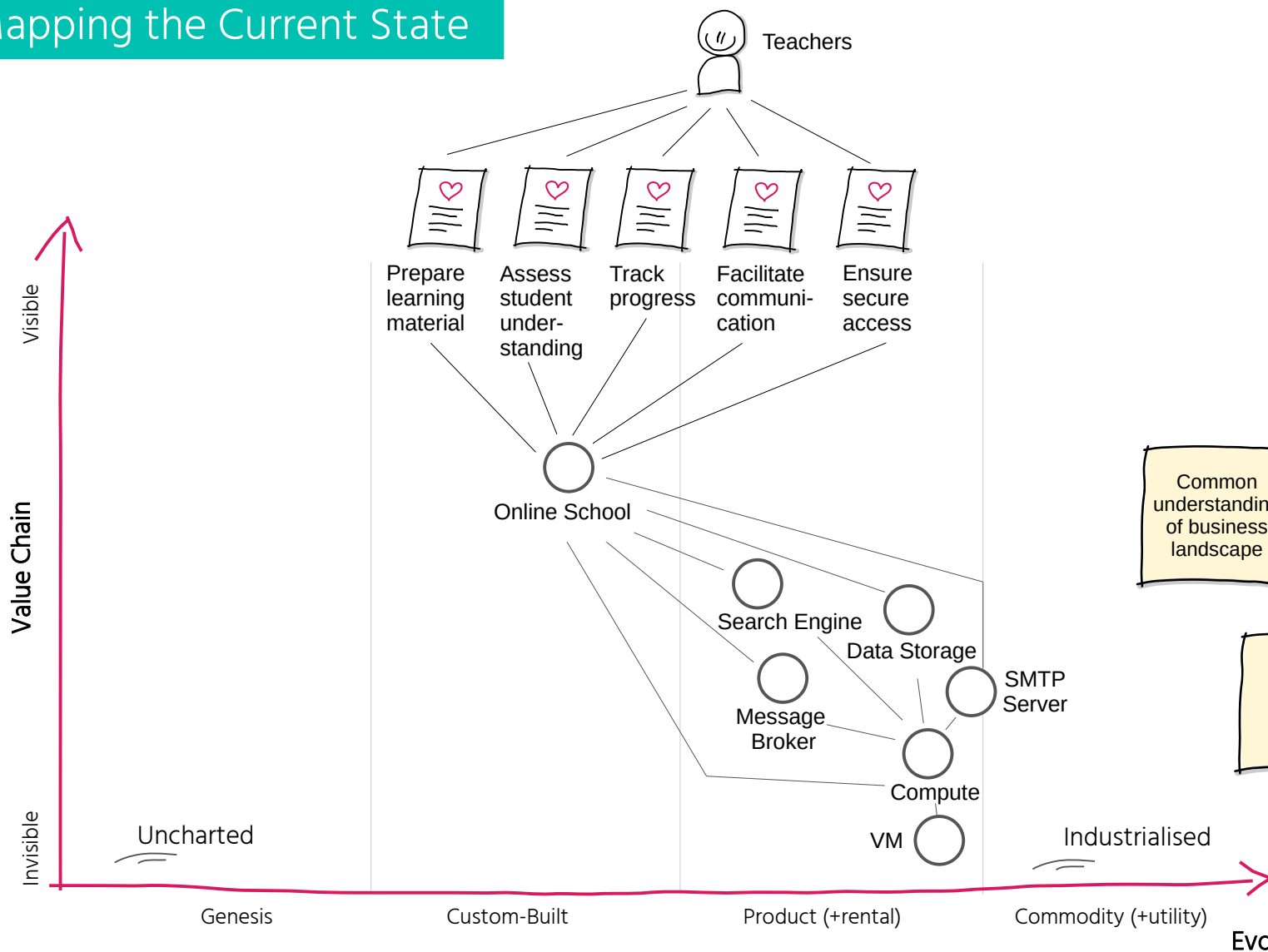


WARDLEY MAPS
TOPOGRAPHICAL
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Mapping the Current State



WARDLEY MAPS TOPOGRAPHICAL INTELLIGENCE IN BUSINESS



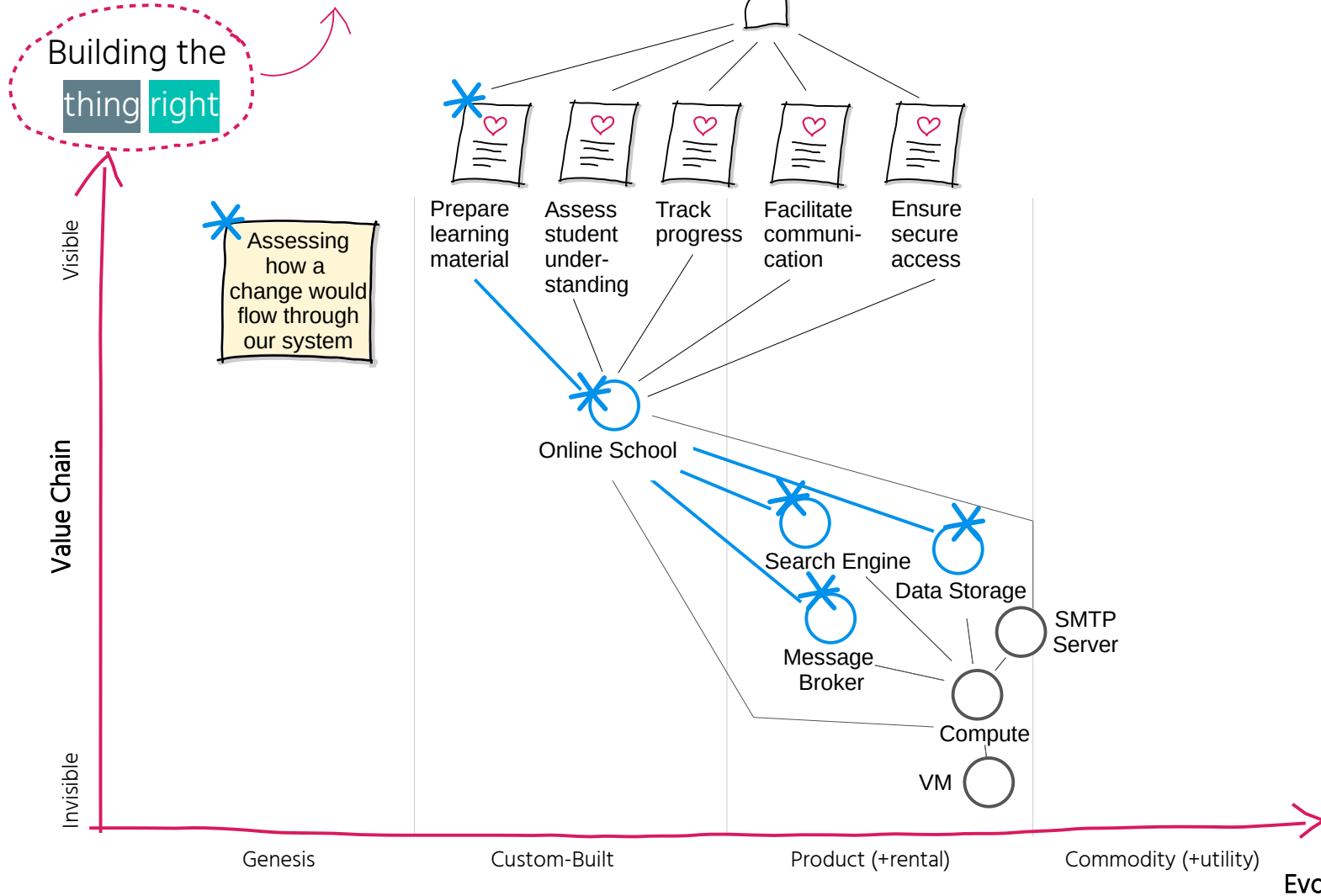
SIMON WARDLEY

Common
understanding
of business
landscape

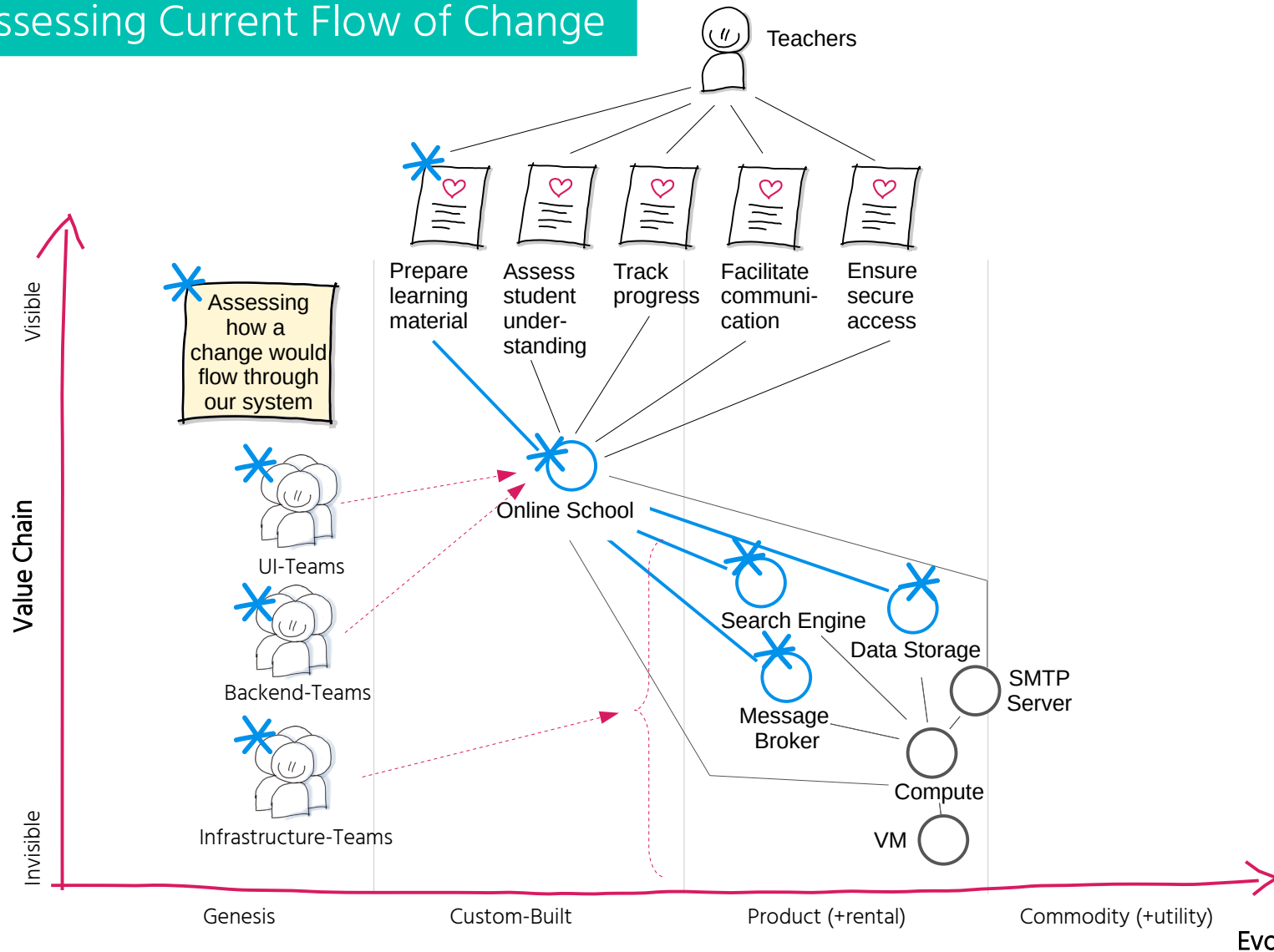
Where to
invest?

What to
evolve?

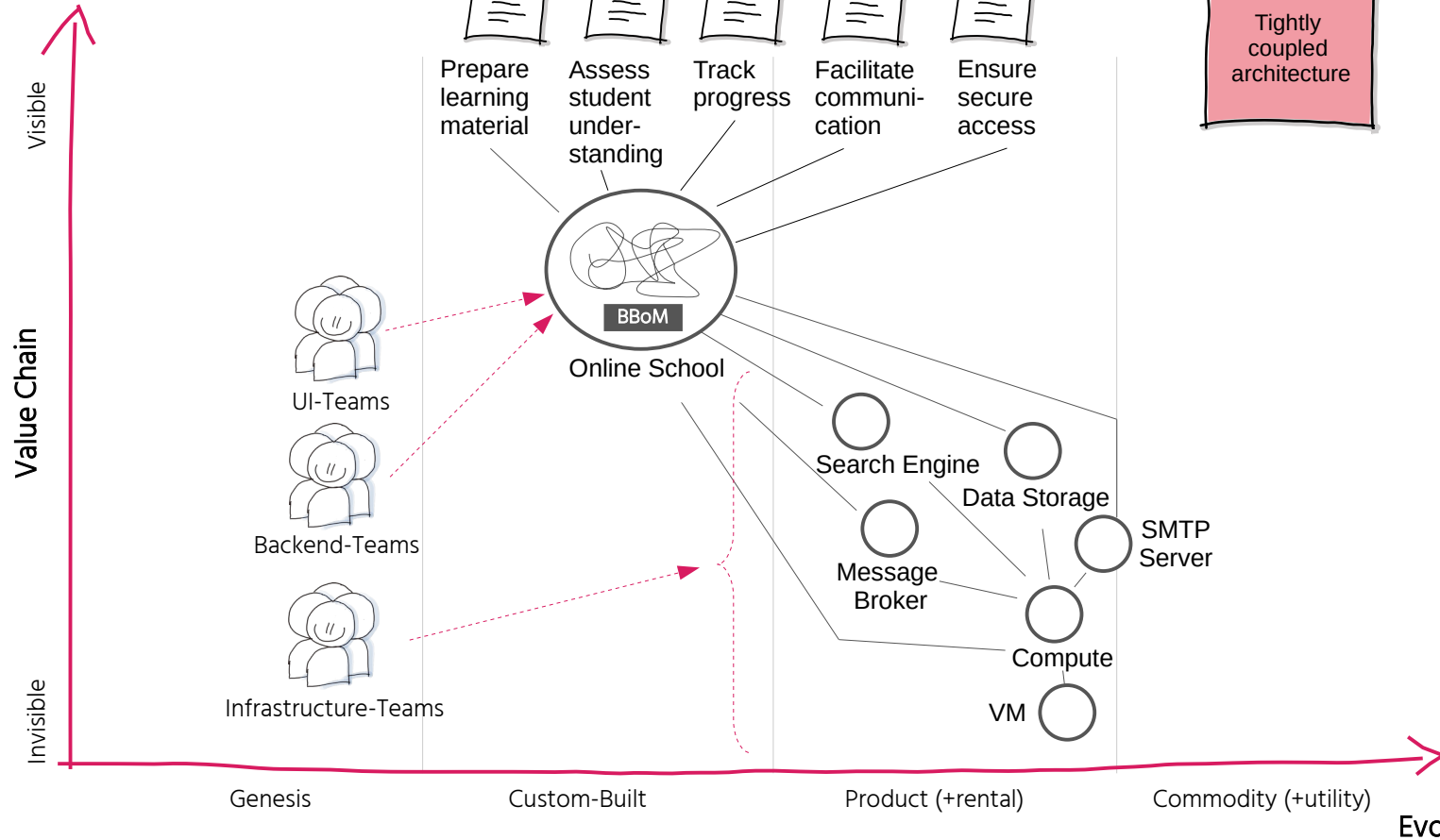
Assessing Current Flow of Change



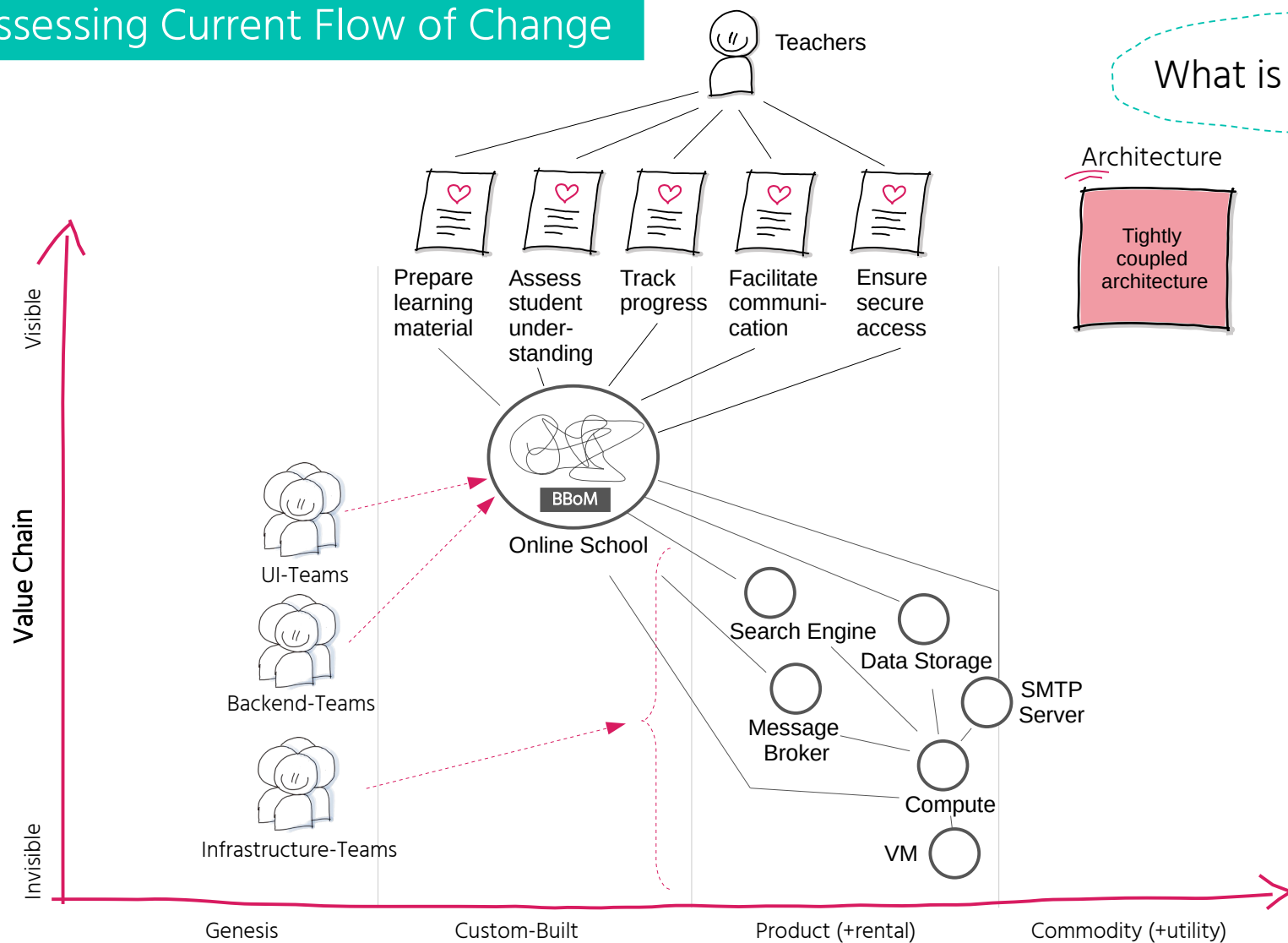
Assessing Current Flow of Change



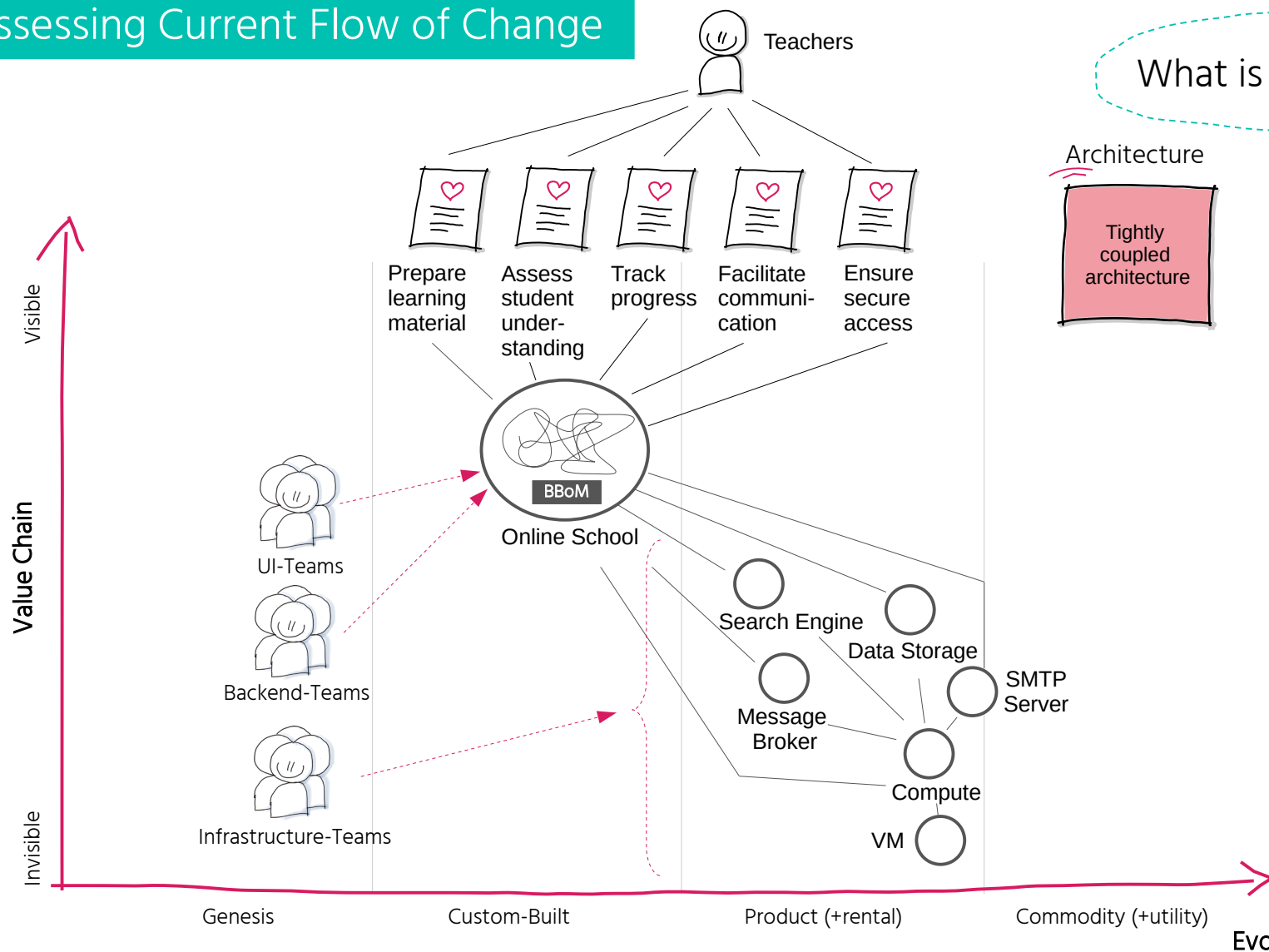
Assessing Current Flow of Change



Assessing Current Flow of Change



Assessing Current Flow of Change



What is preventing flow?

Architecture

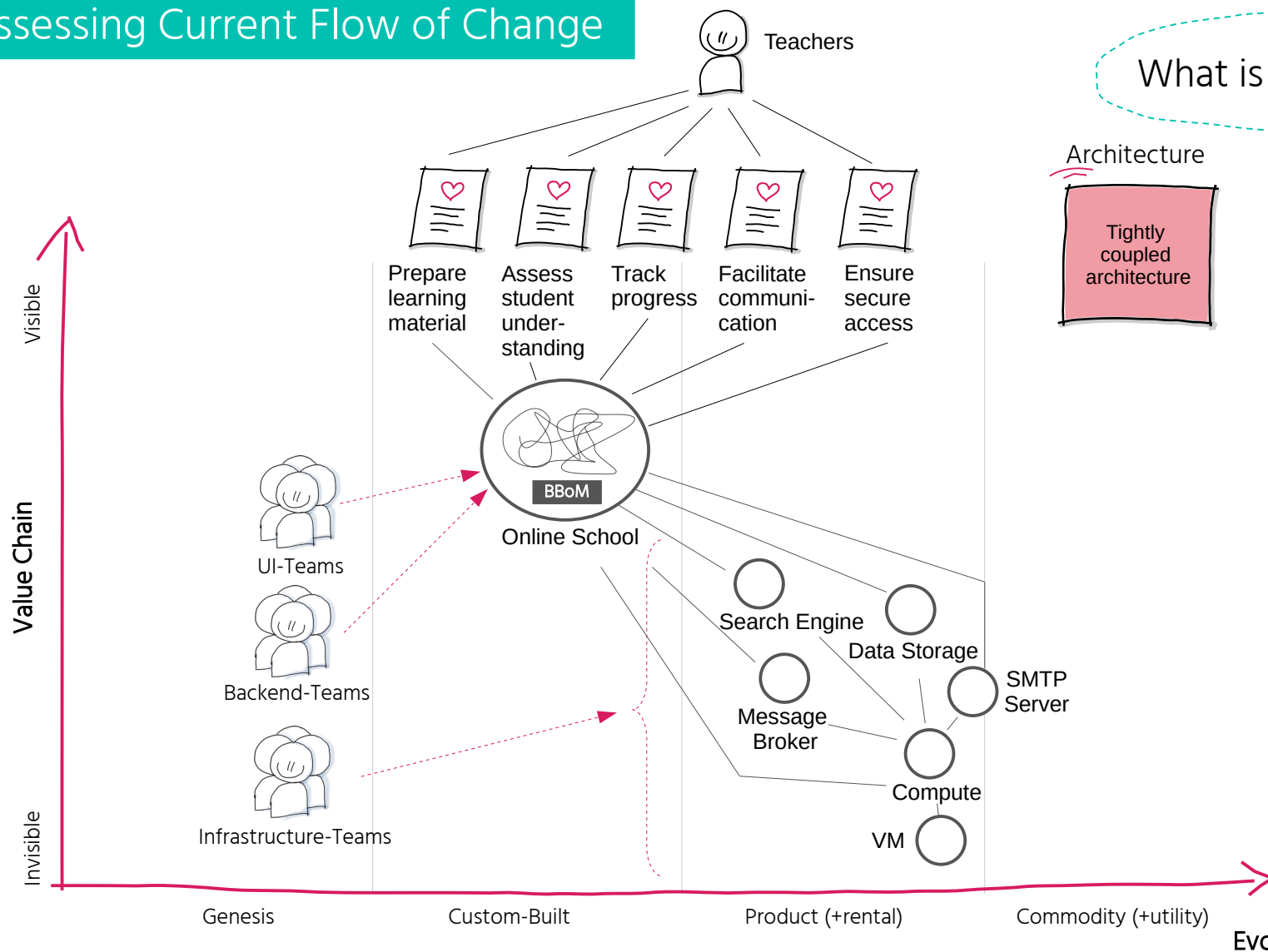
Tightly coupled architecture

Team Ownership

Lack of clear ownership

Teams own too many/large parts of the system

Assessing Current Flow of Change



What is preventing flow?

Architecture

Tightly coupled architecture

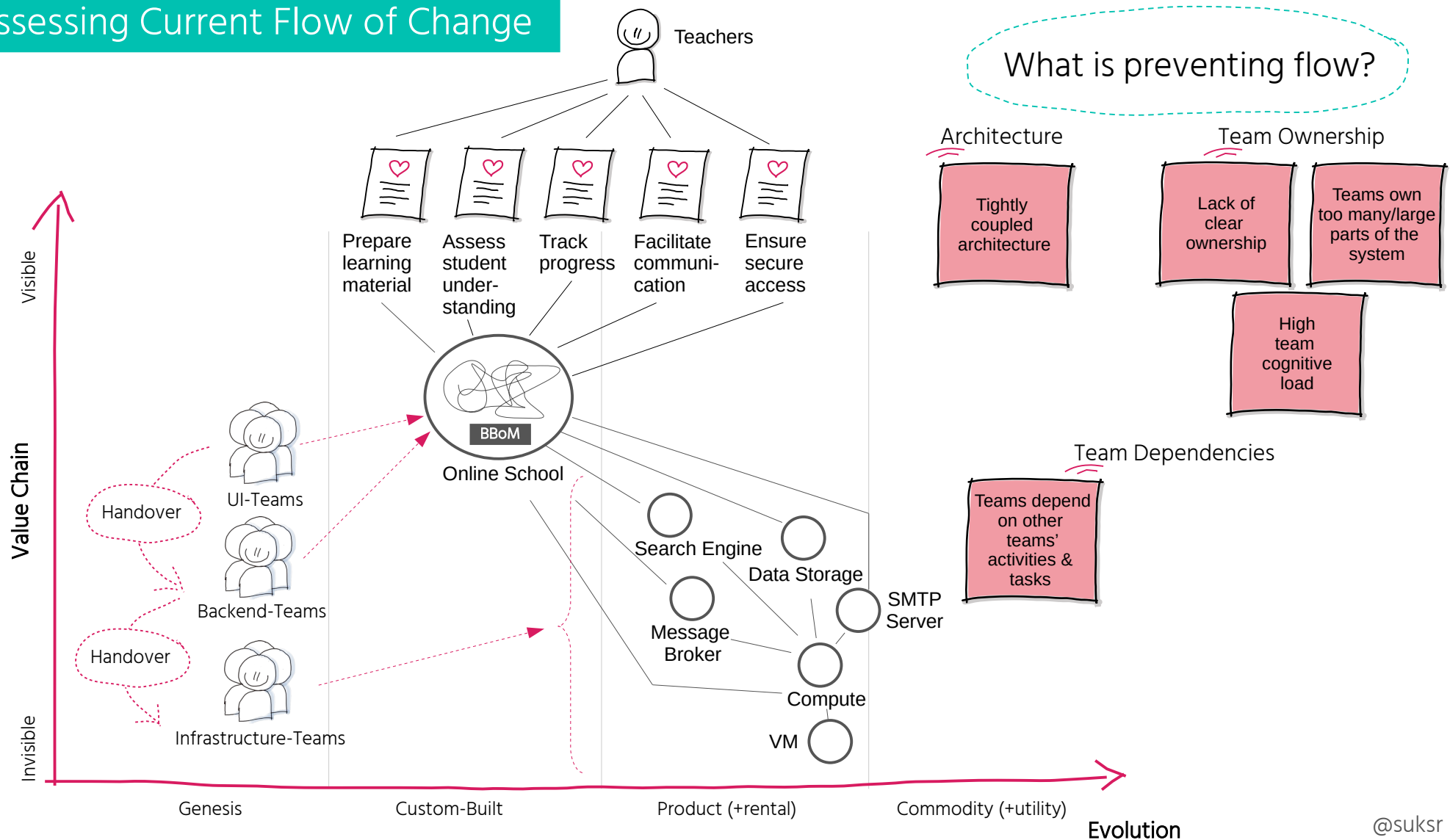
Team Ownership

Lack of clear ownership

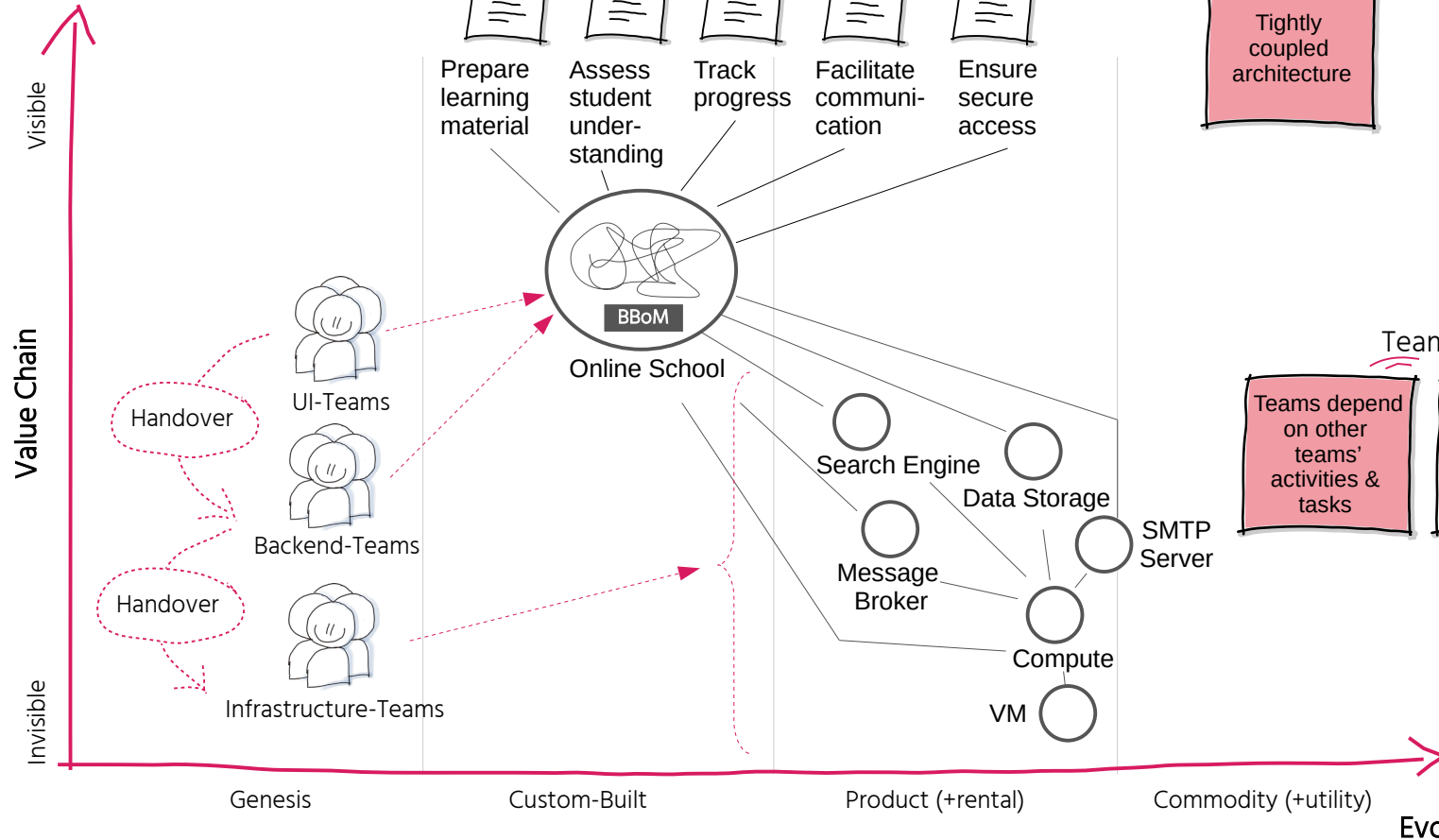
Teams own too many/large parts of the system

High team cognitive load

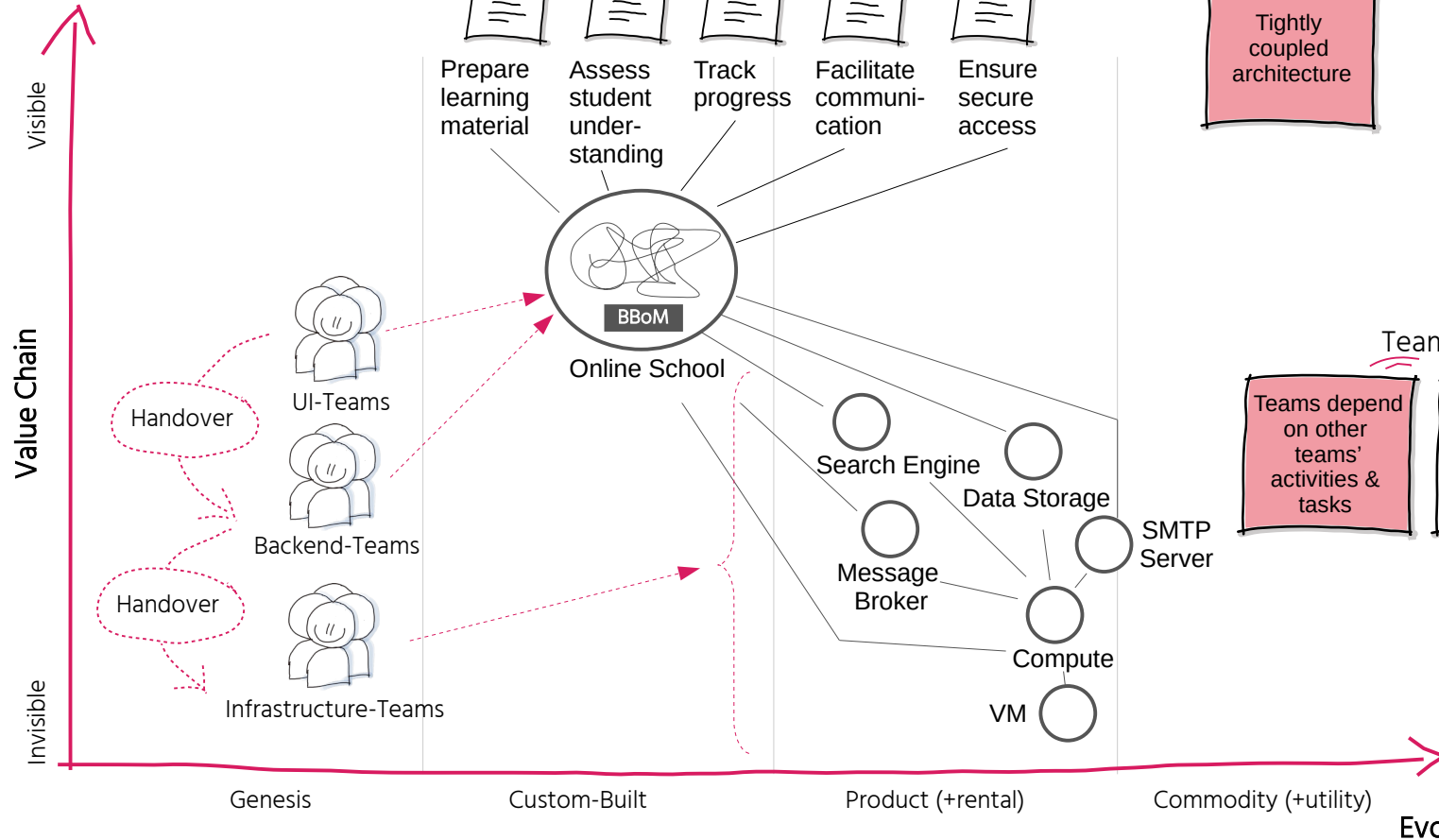
Assessing Current Flow of Change



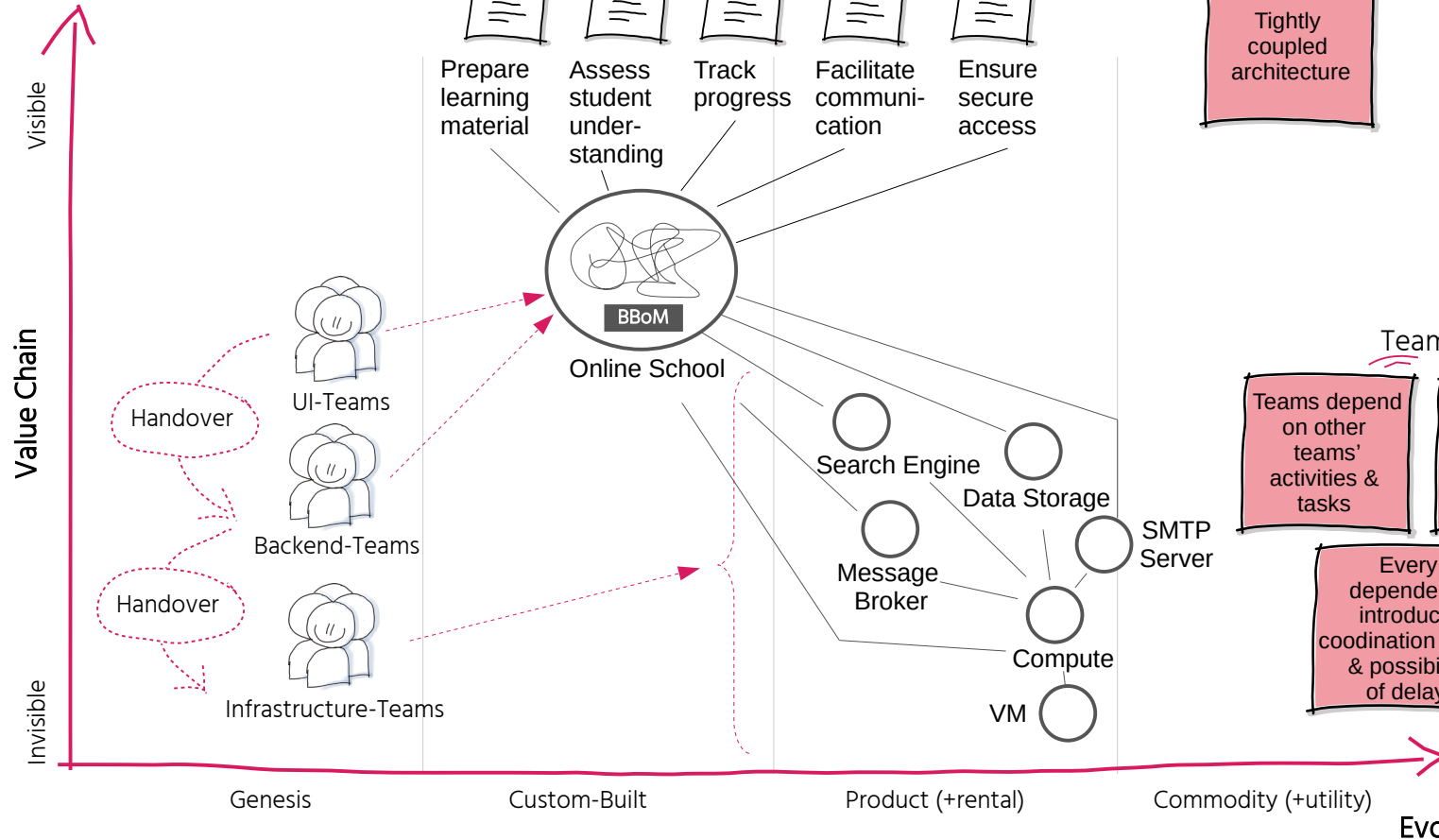
Assessing Current Flow of Change



Assessing Current Flow of Change



Assessing Current Flow of Change



What is preventing flow?

Architecture

Tightly coupled architecture

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Teams own too many/large parts of the system

High team cognitive load

Team Dependencies

Teams depend on other teams' activities & tasks

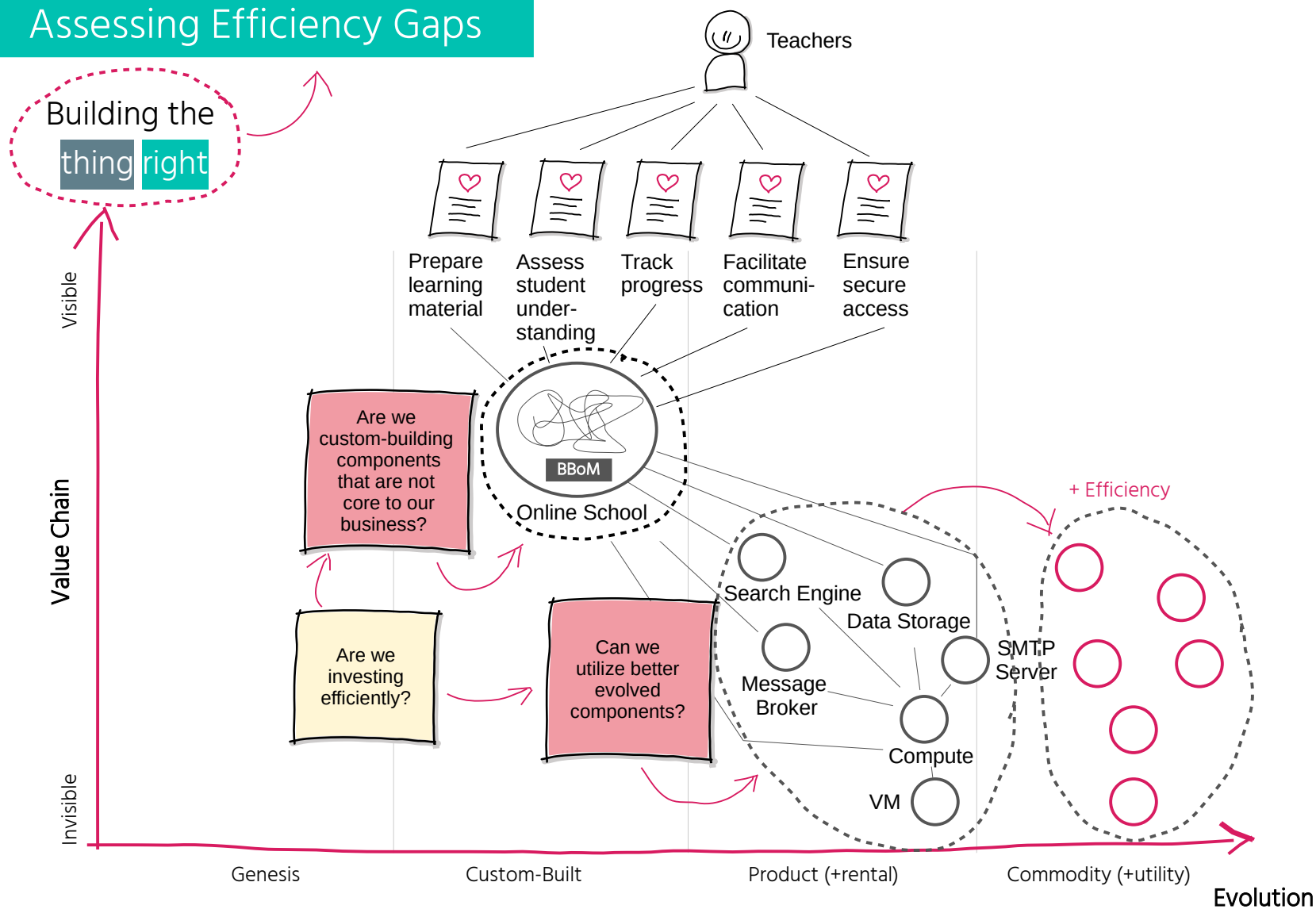
Teams depend on other people's specific expertise

Teams depend on external decisions & approval

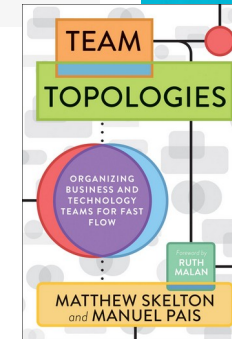
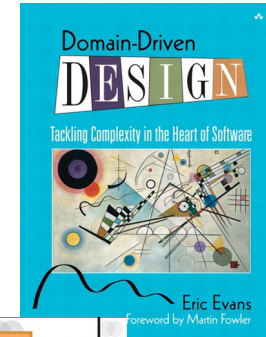
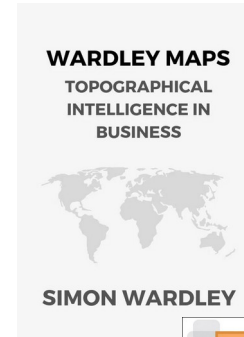
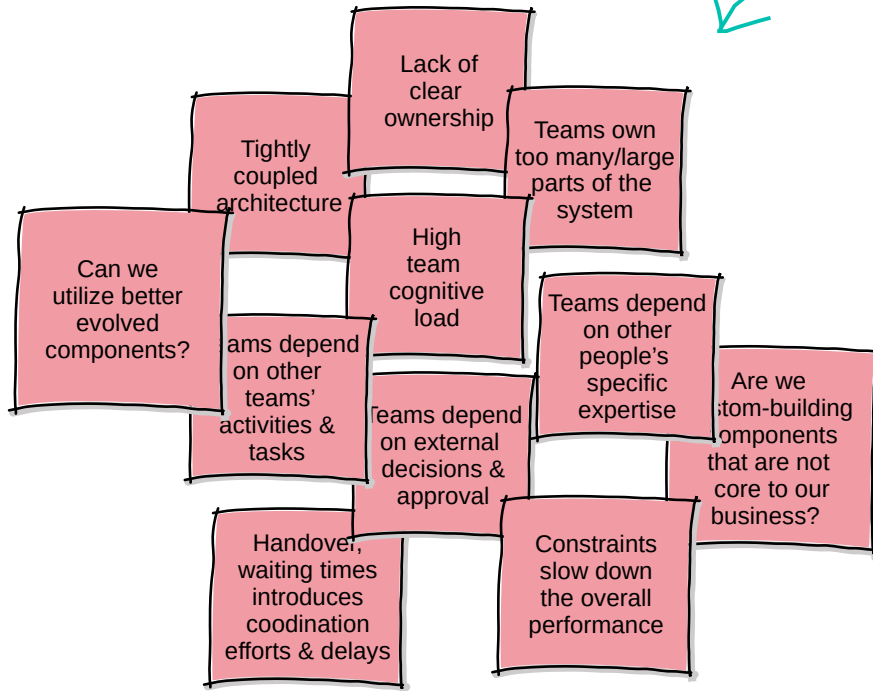
Every dependency introduces coordination efforts & possibility of delays

Constraints slow down the overall performance

Assessing Efficiency Gaps

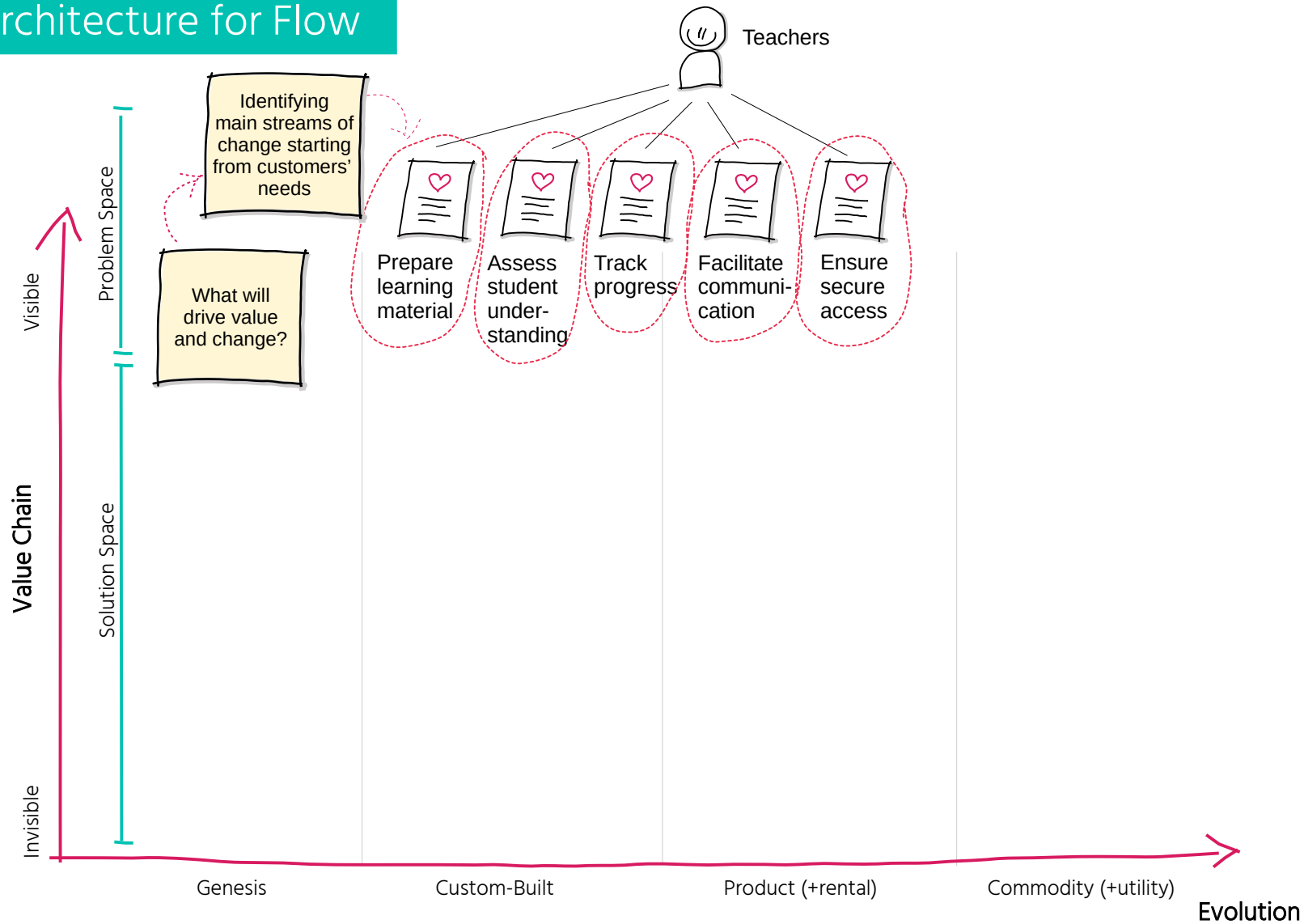


unlock

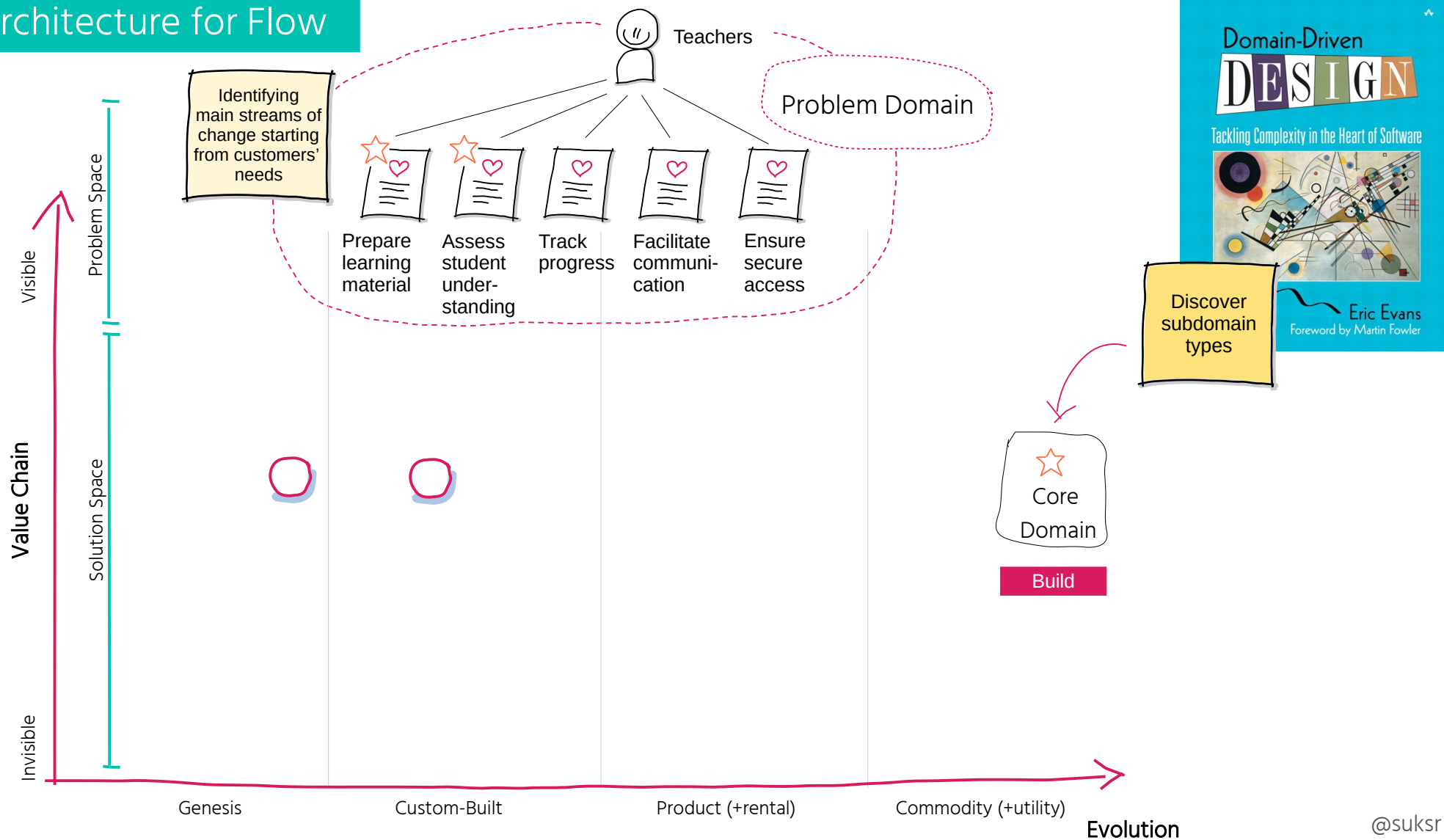


Architecture for Flow

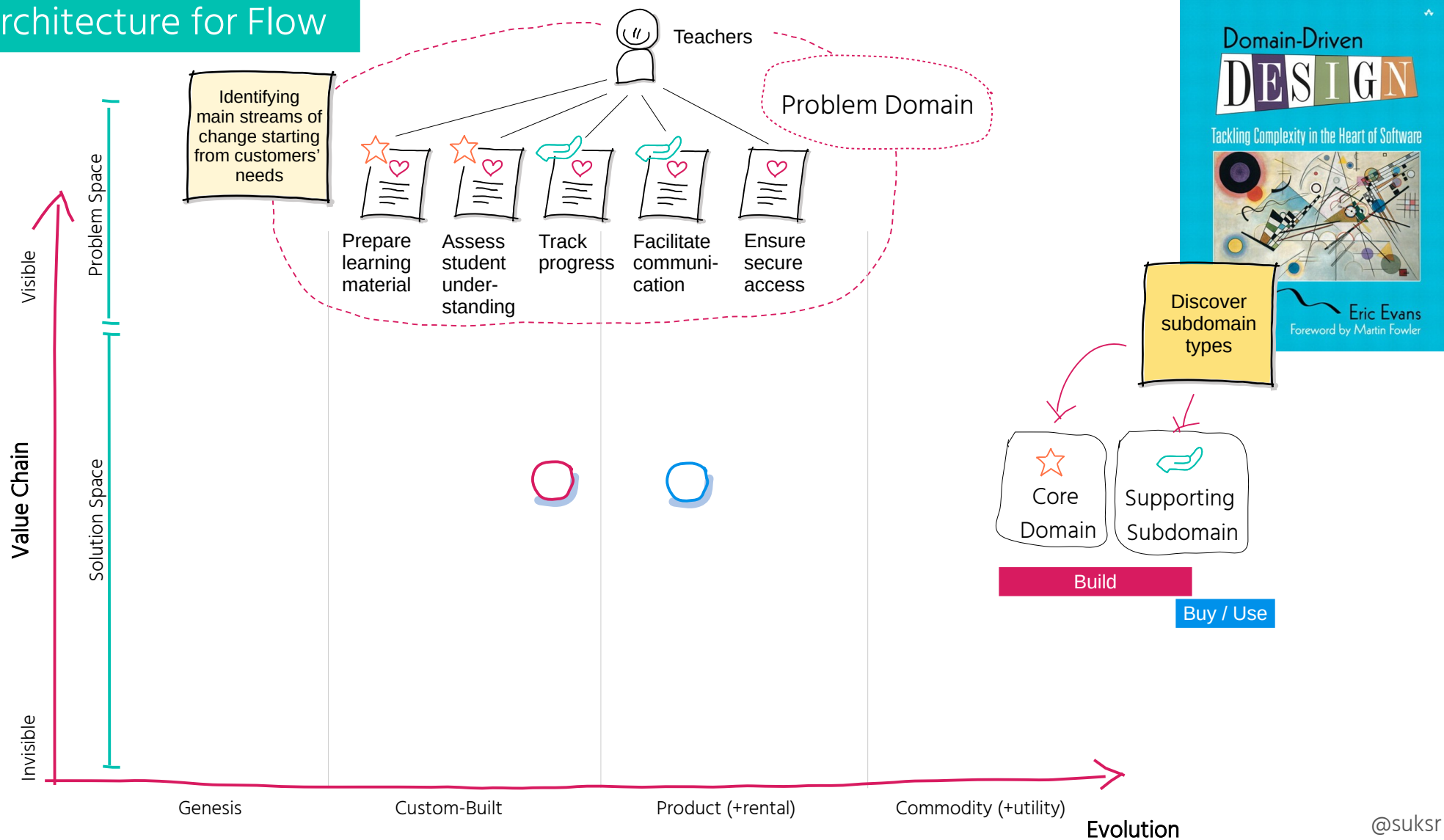
Architecture for Flow



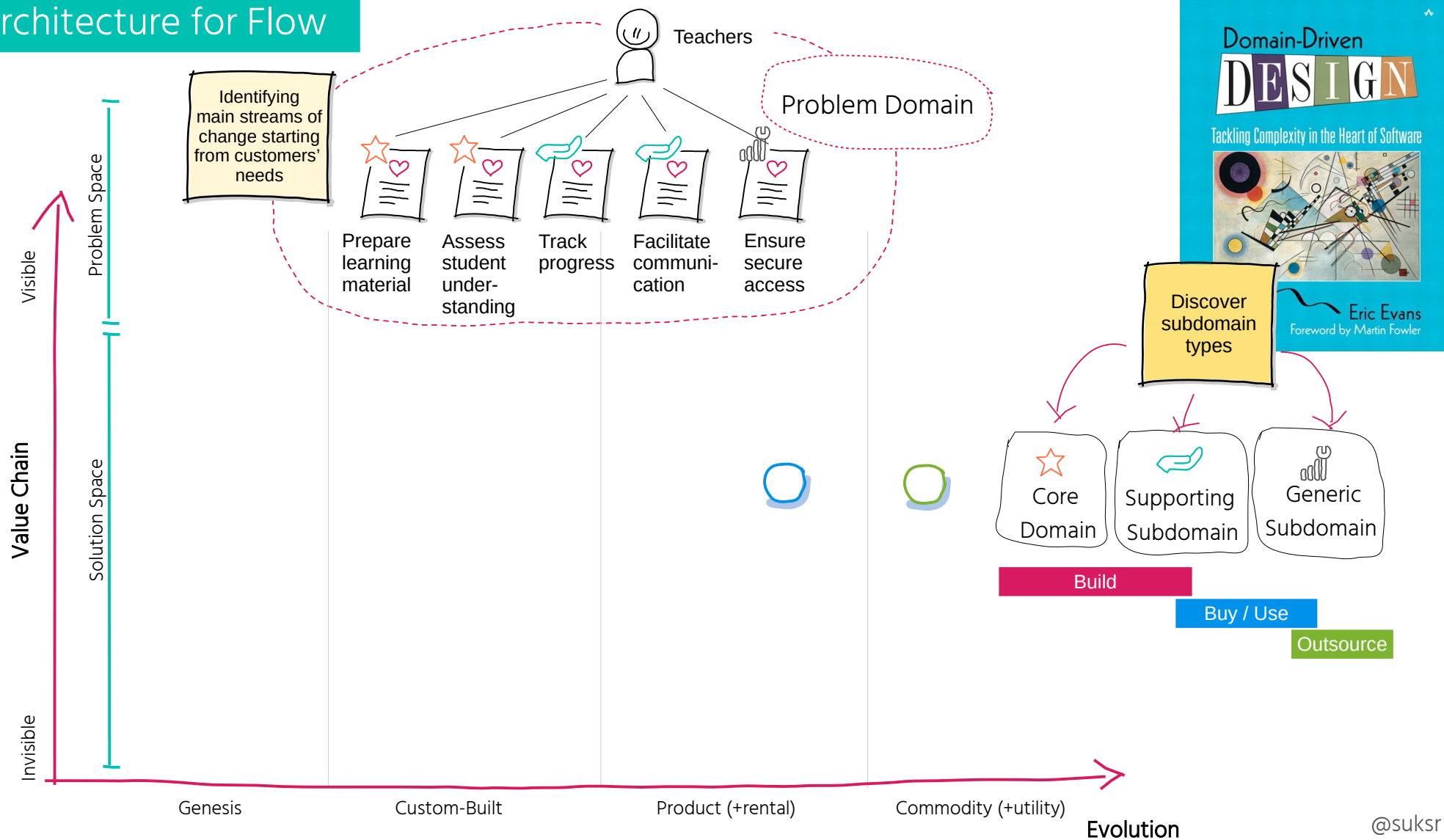
Architecture for Flow



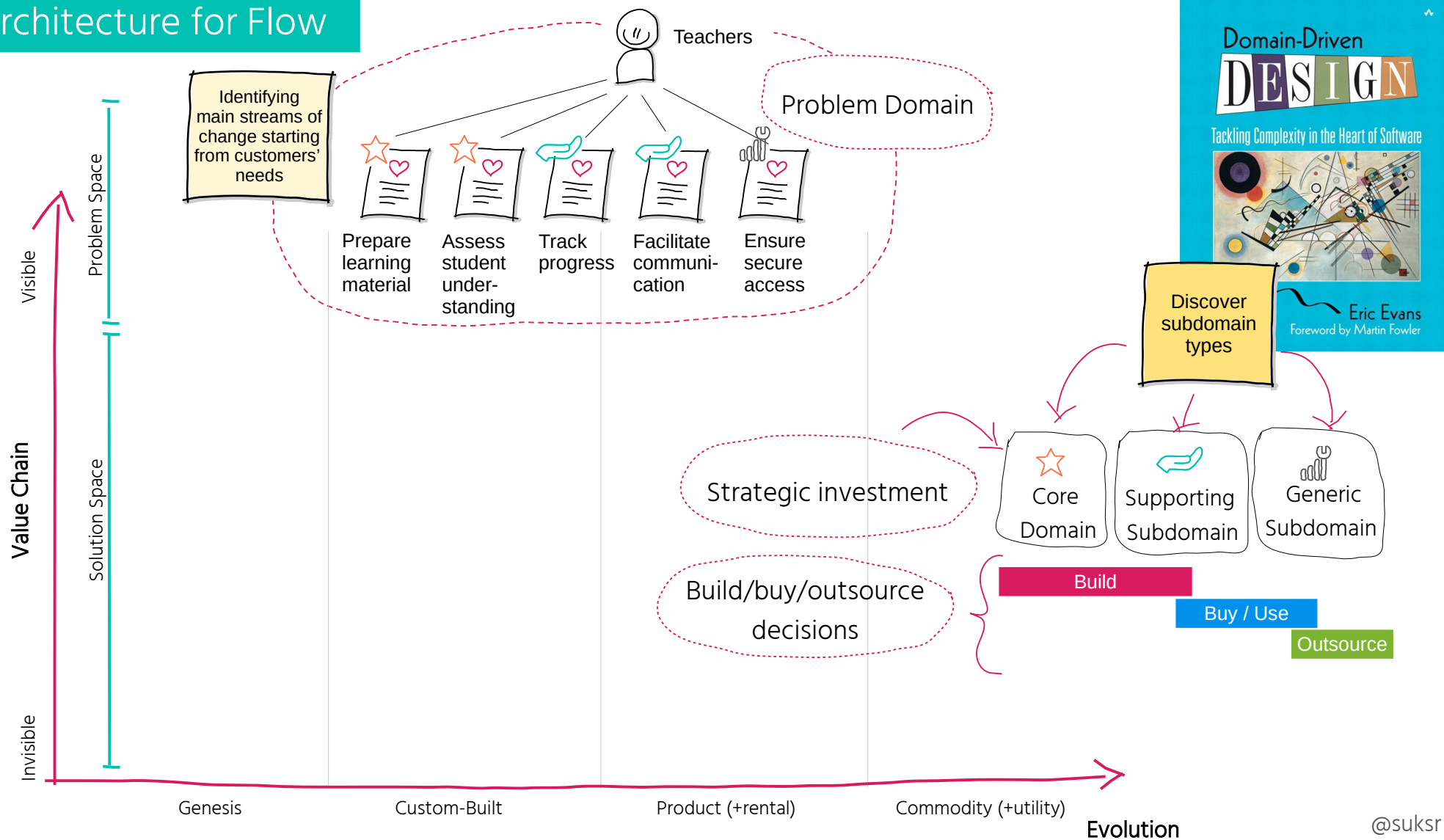
Architecture for Flow



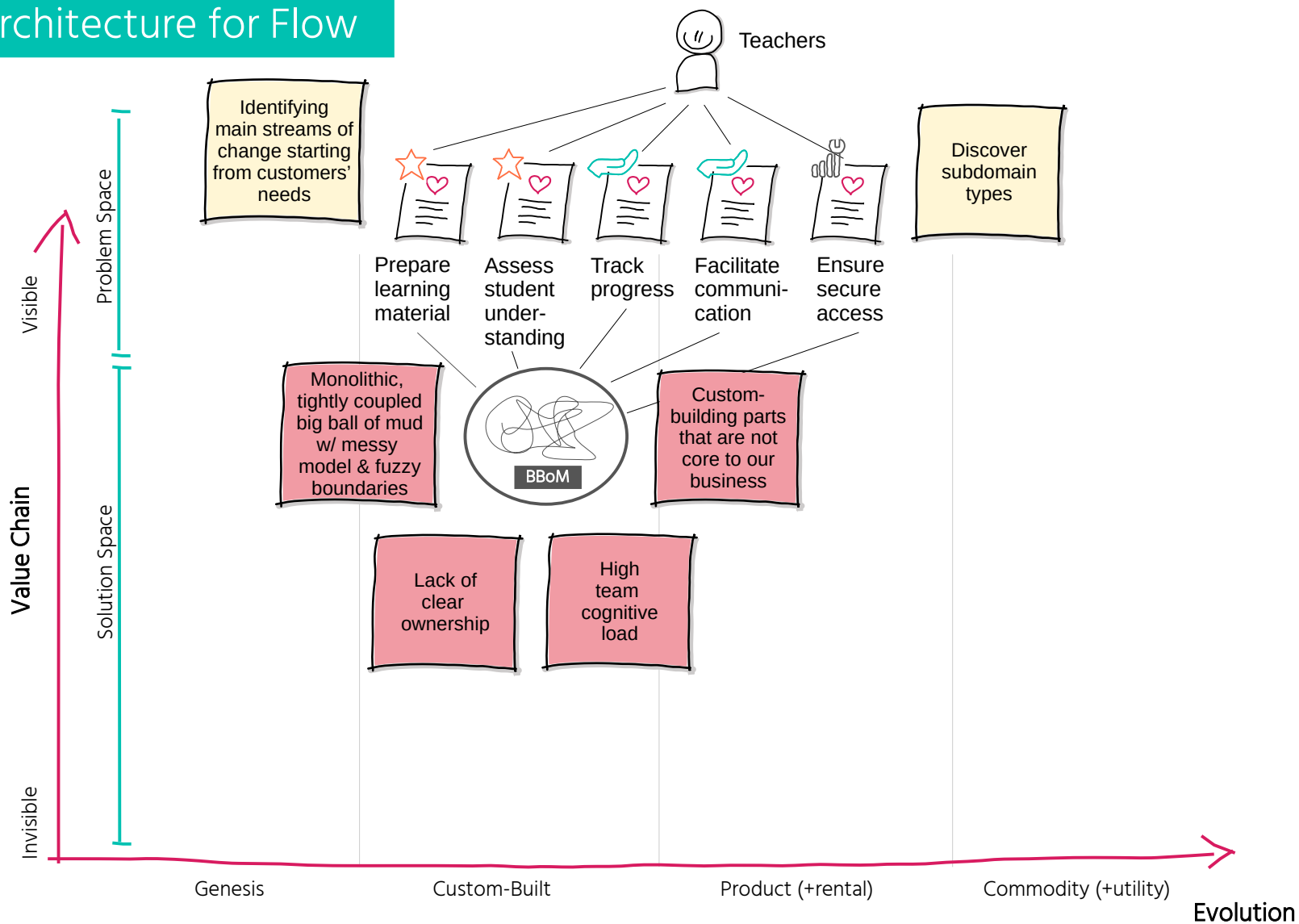
Architecture for Flow



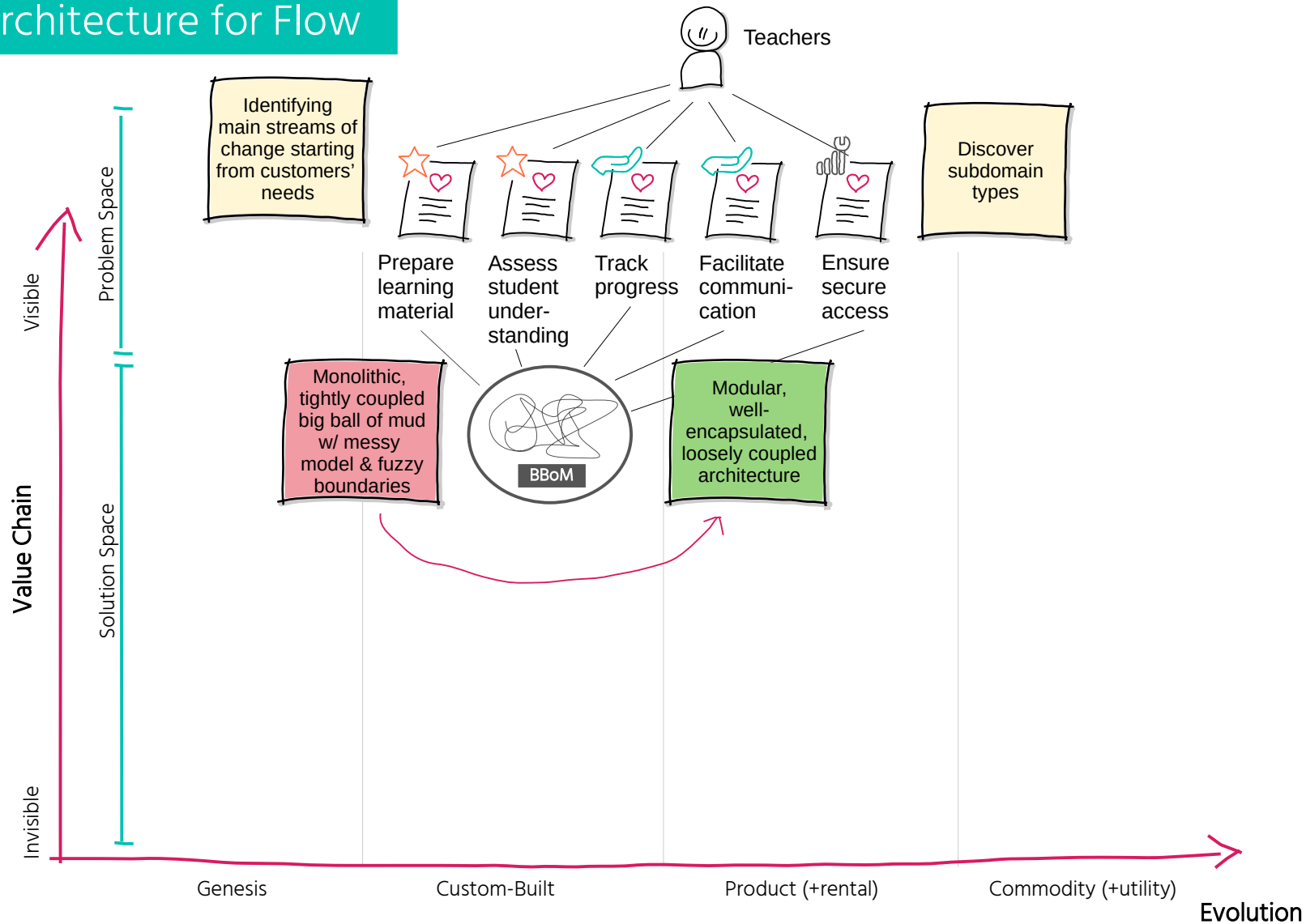
Architecture for Flow



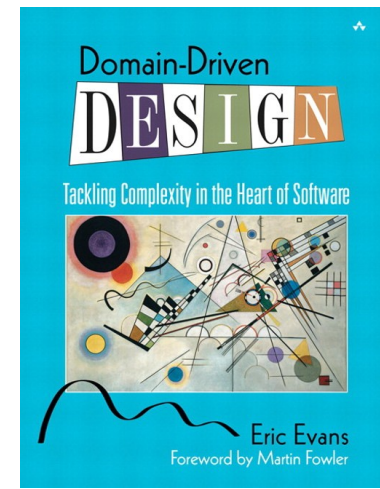
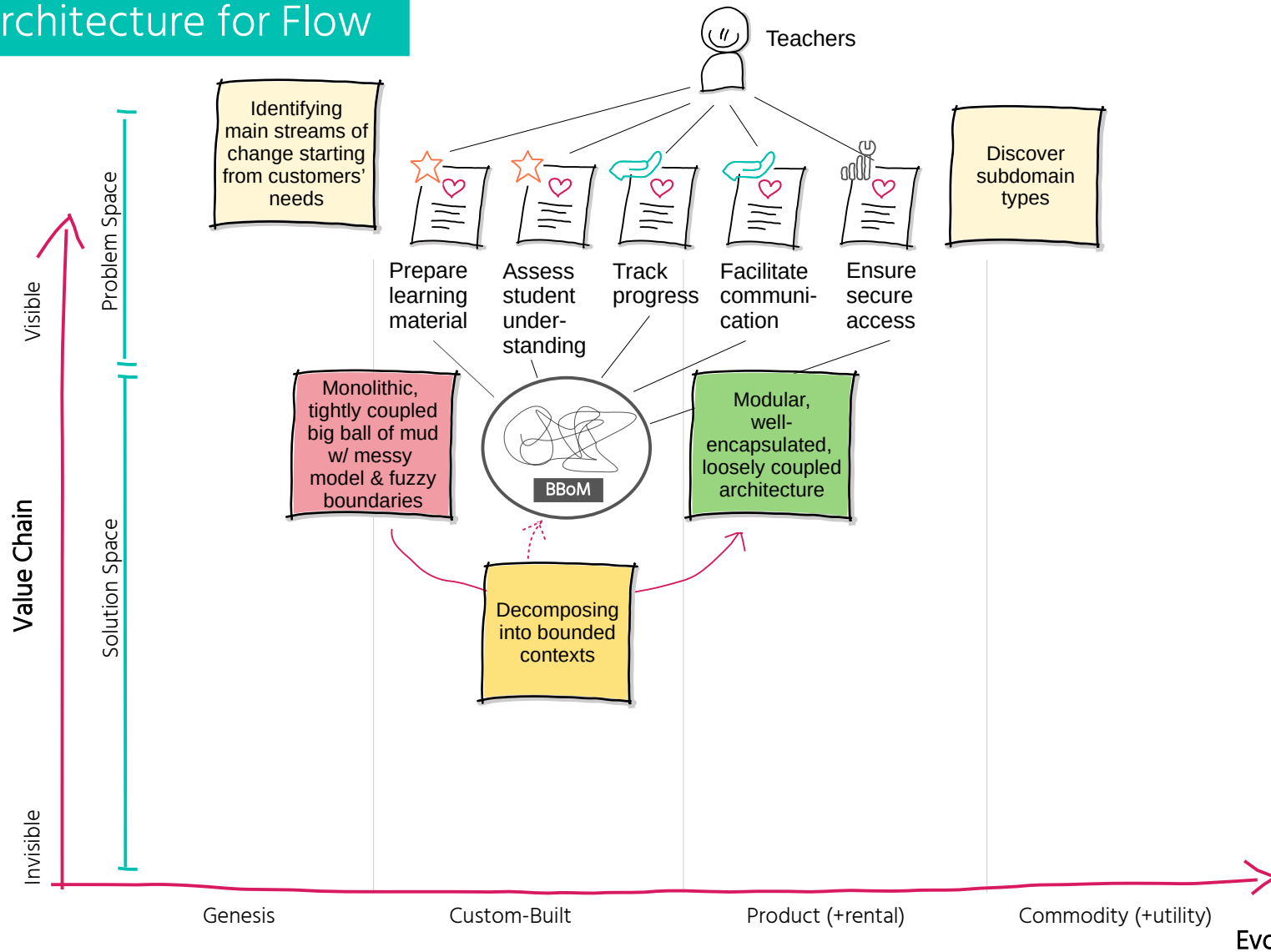
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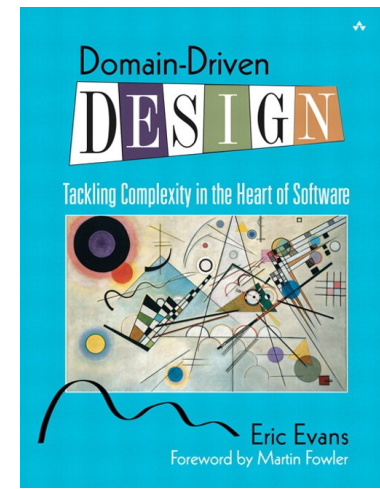
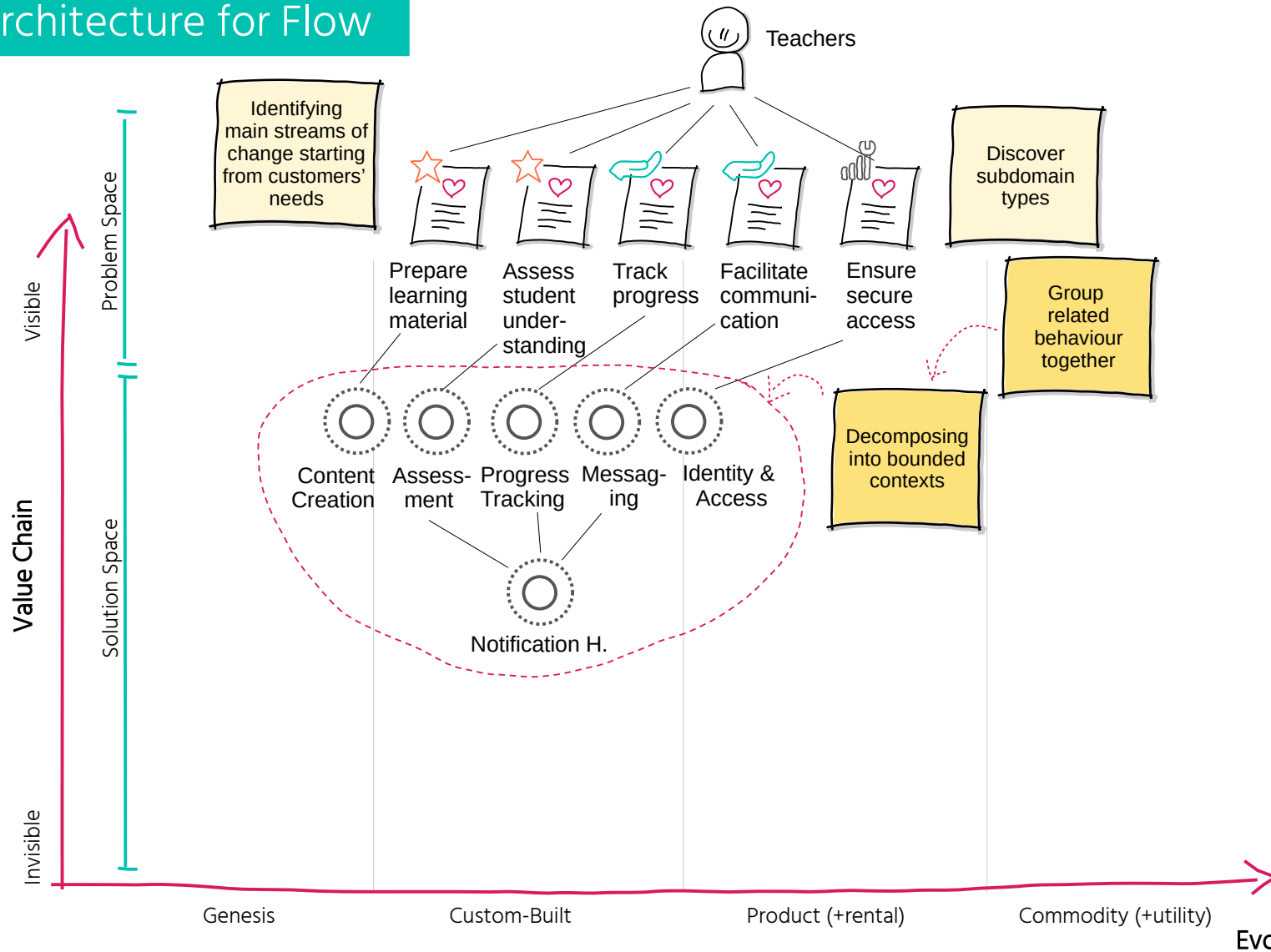
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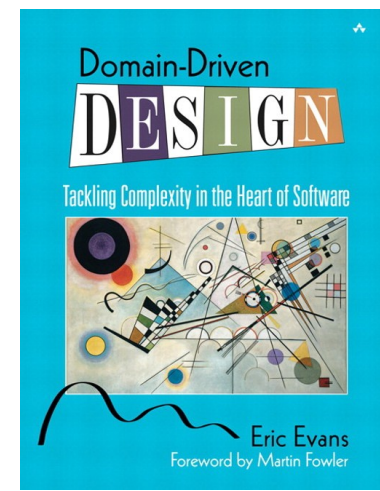
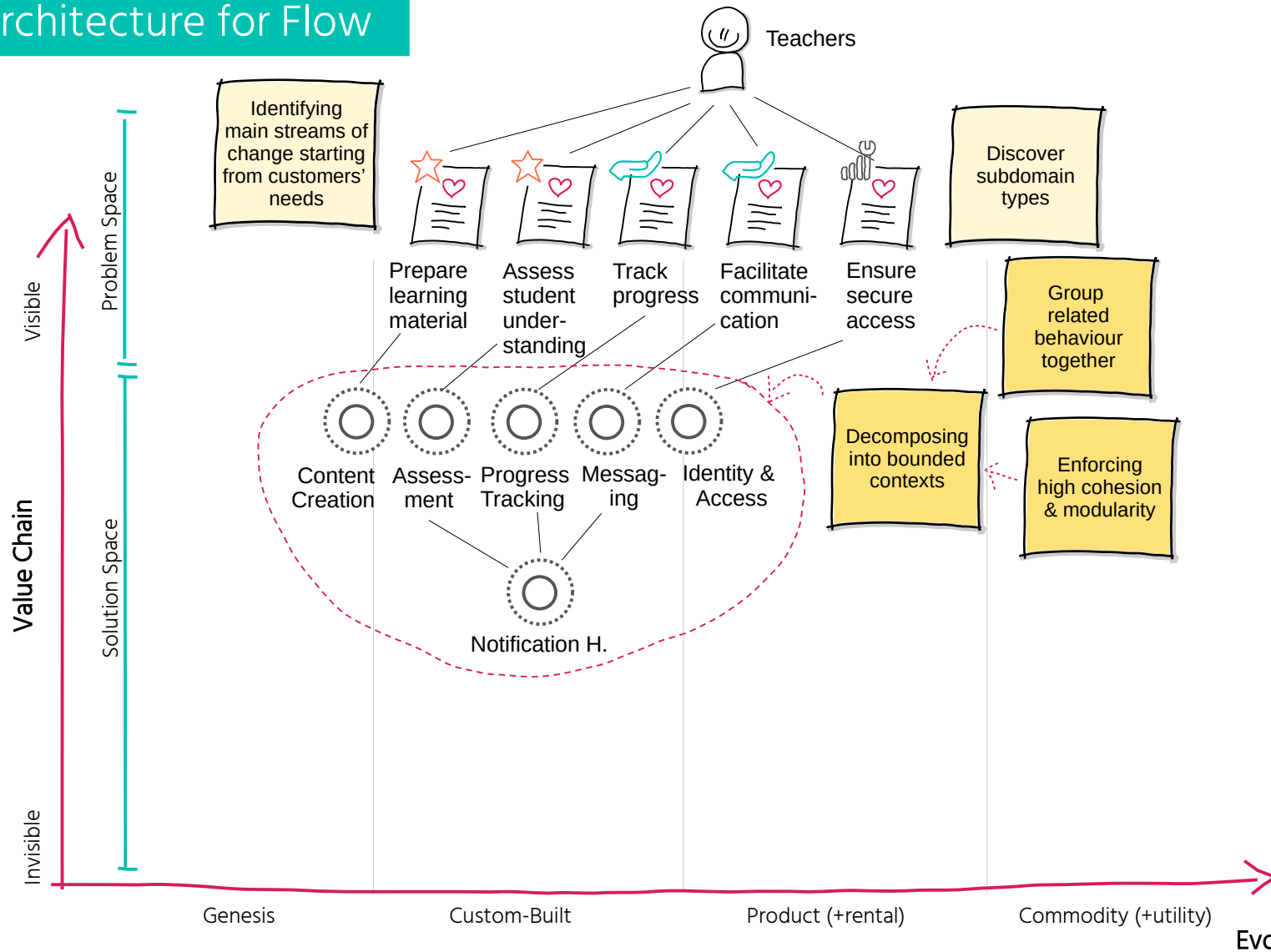
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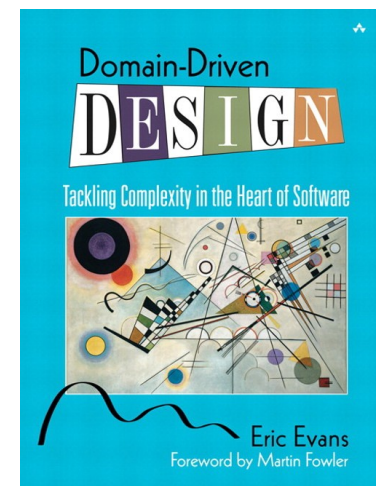
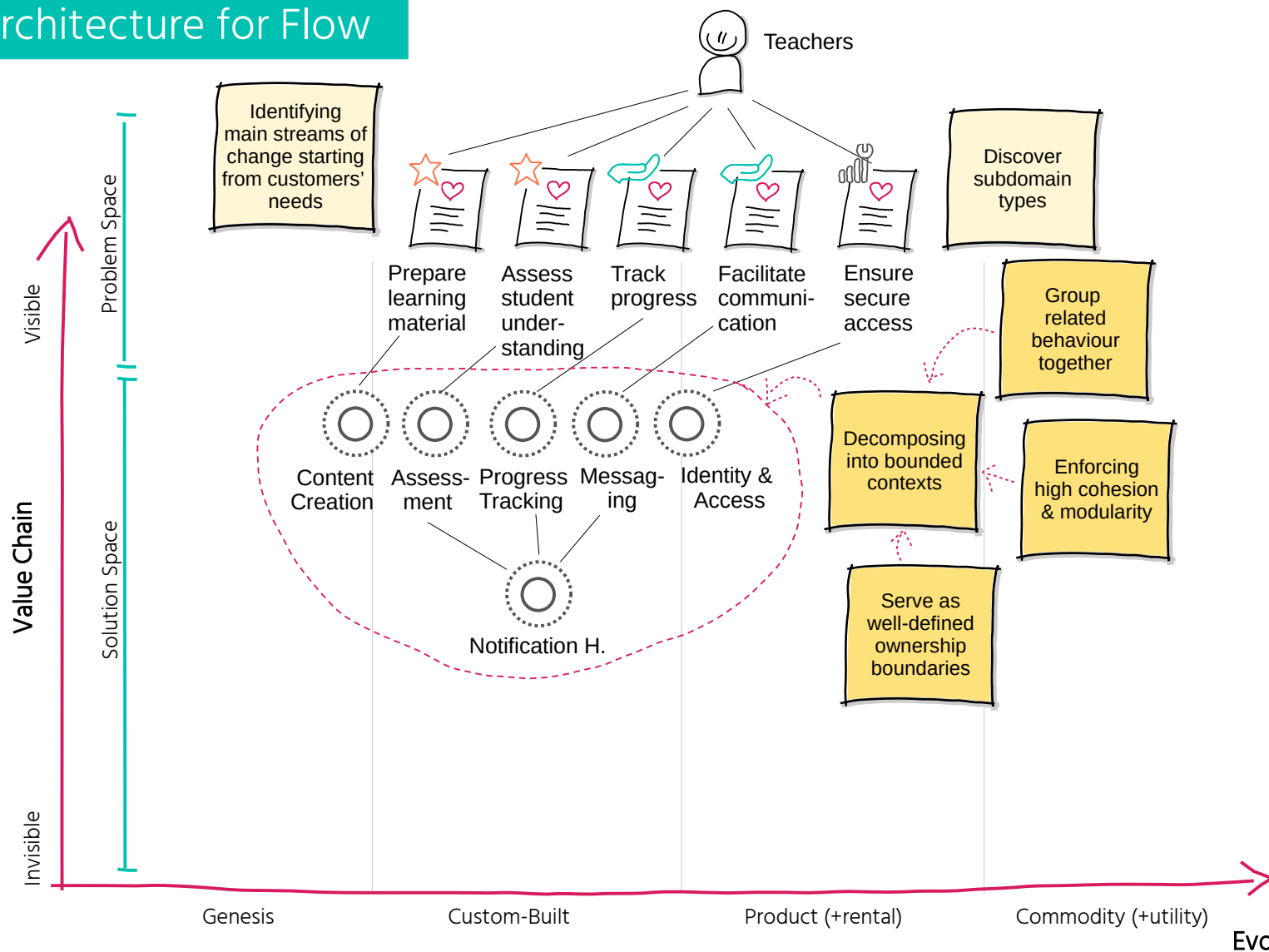
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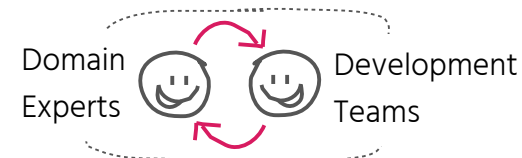
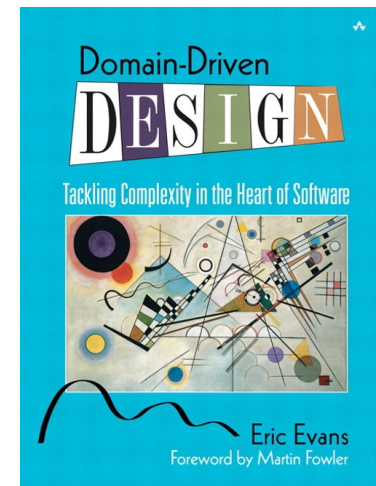
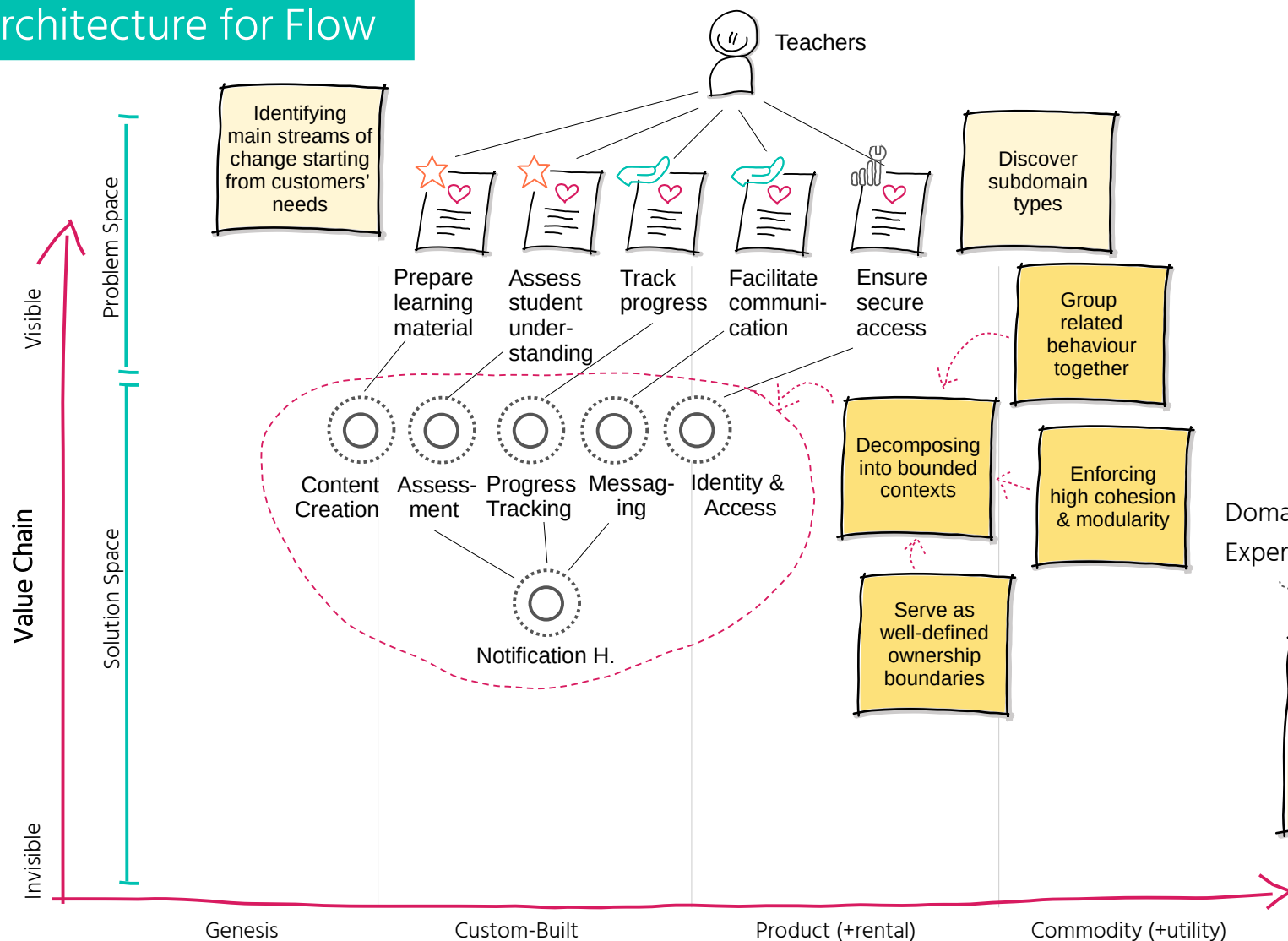
Architecture for Flow



Architecture for Flow

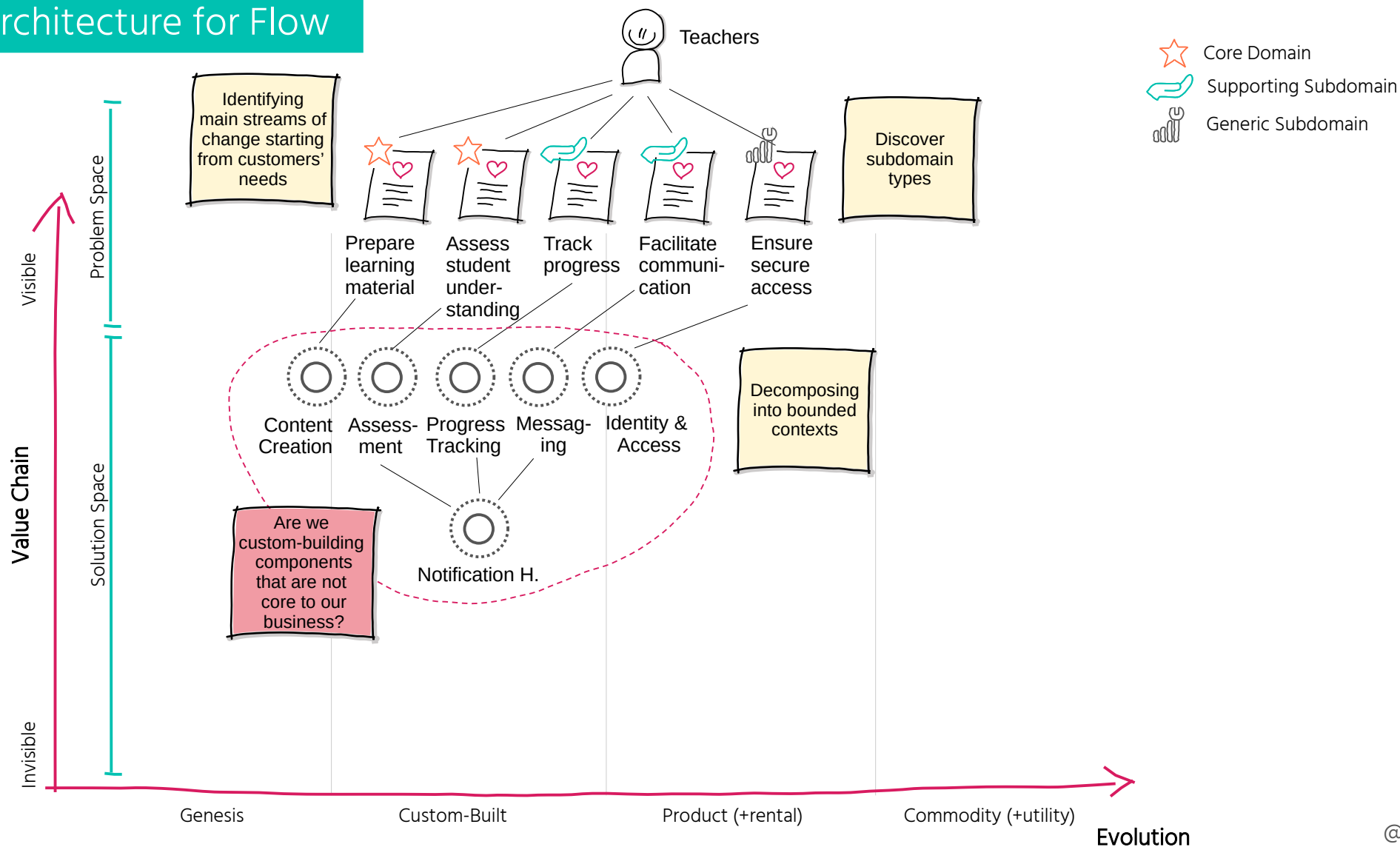


Architecture for Flow

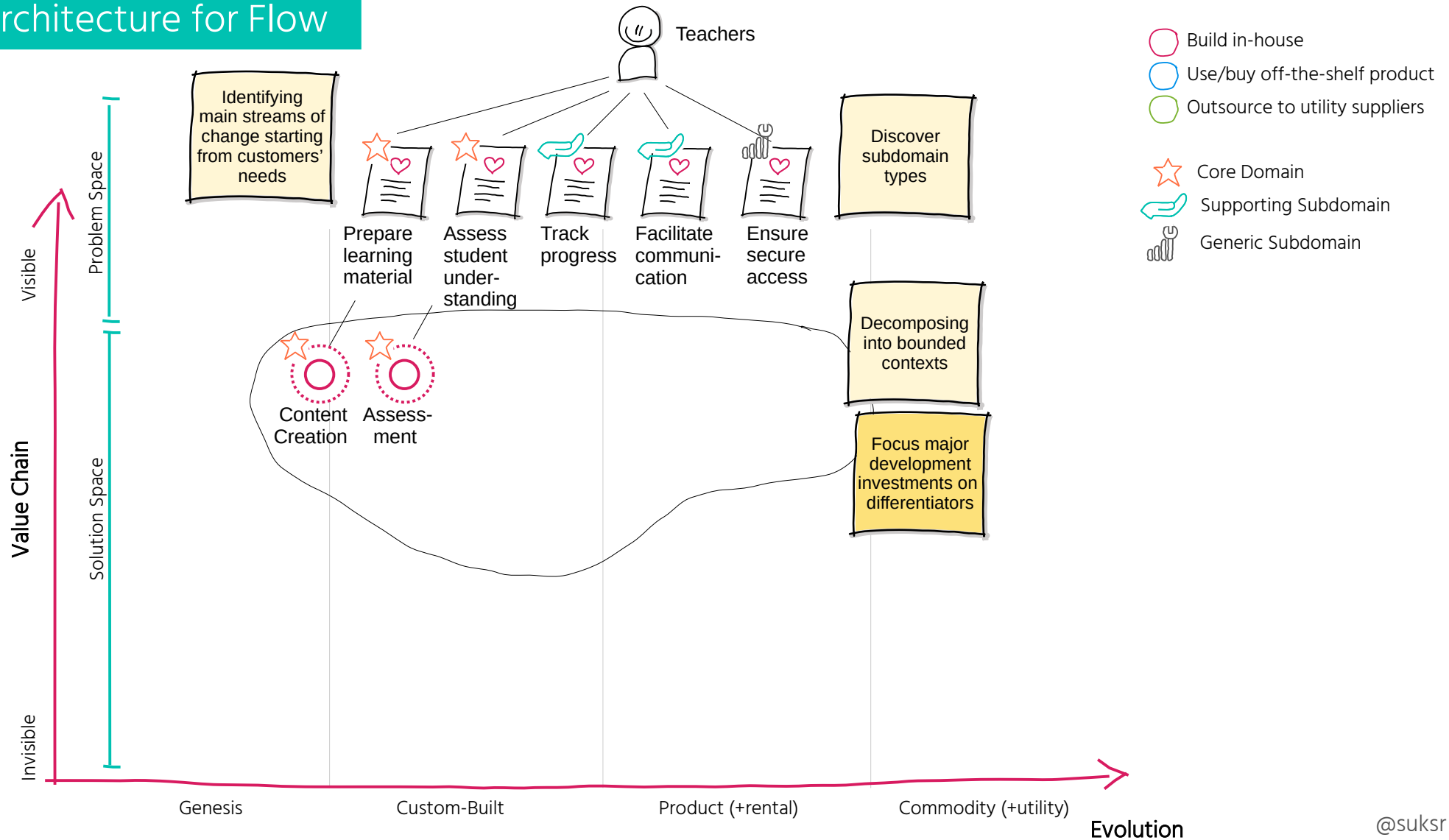


- Available Techniques:
- EventStorming
 - Domain Storytelling
 - Example Mapping
 - Userstory Mapping
 - etc.

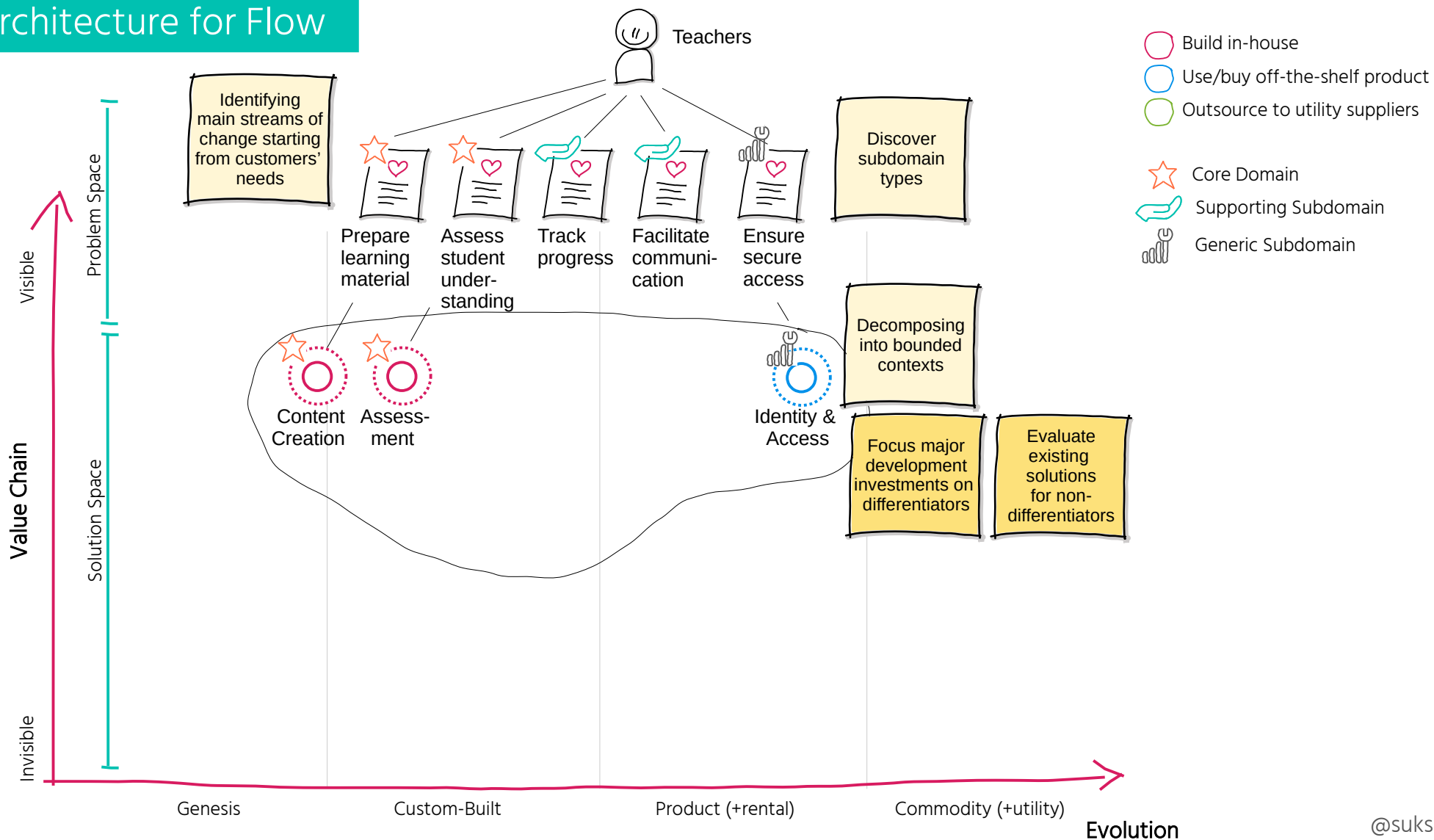
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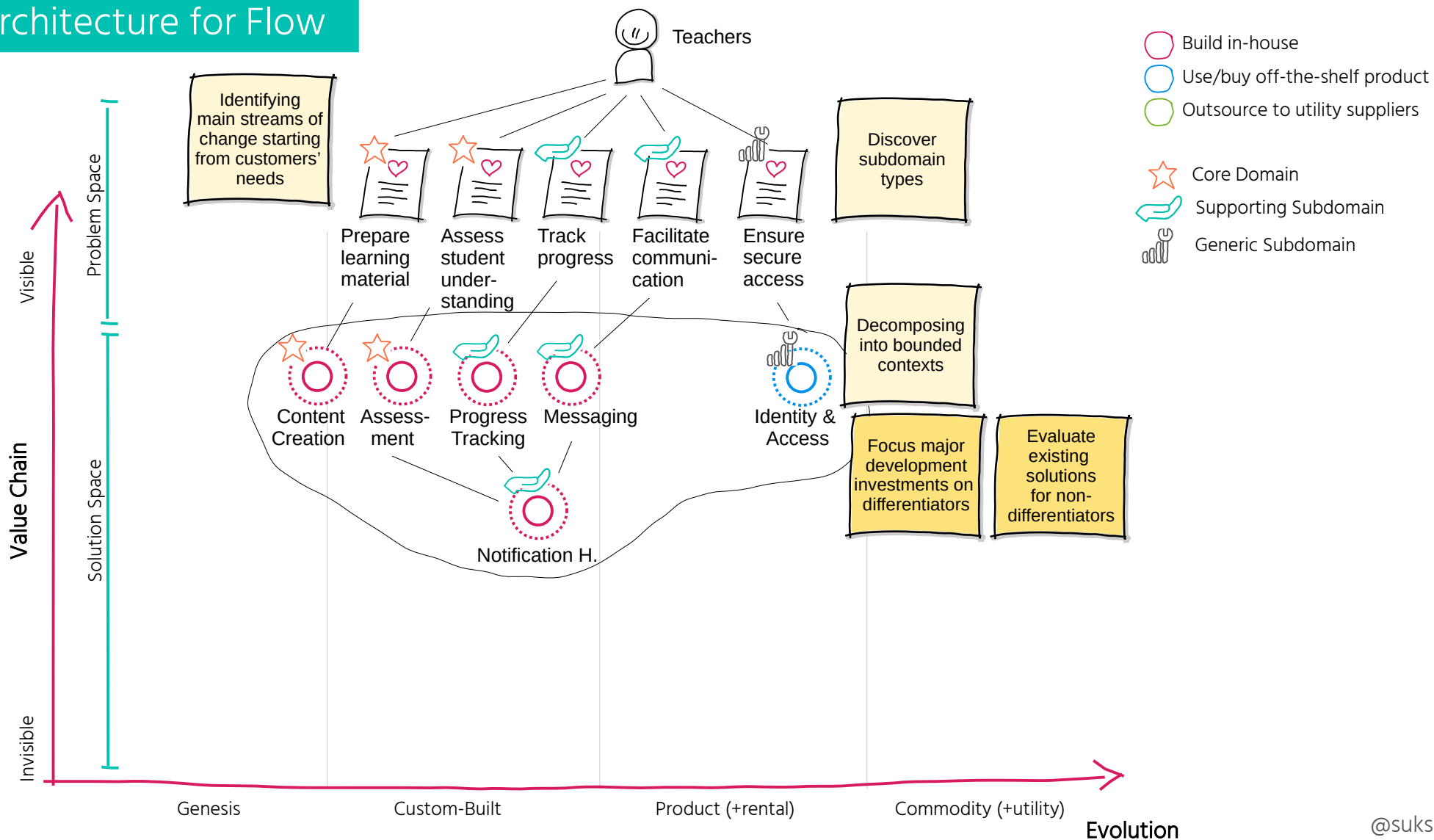
Architecture for Flow



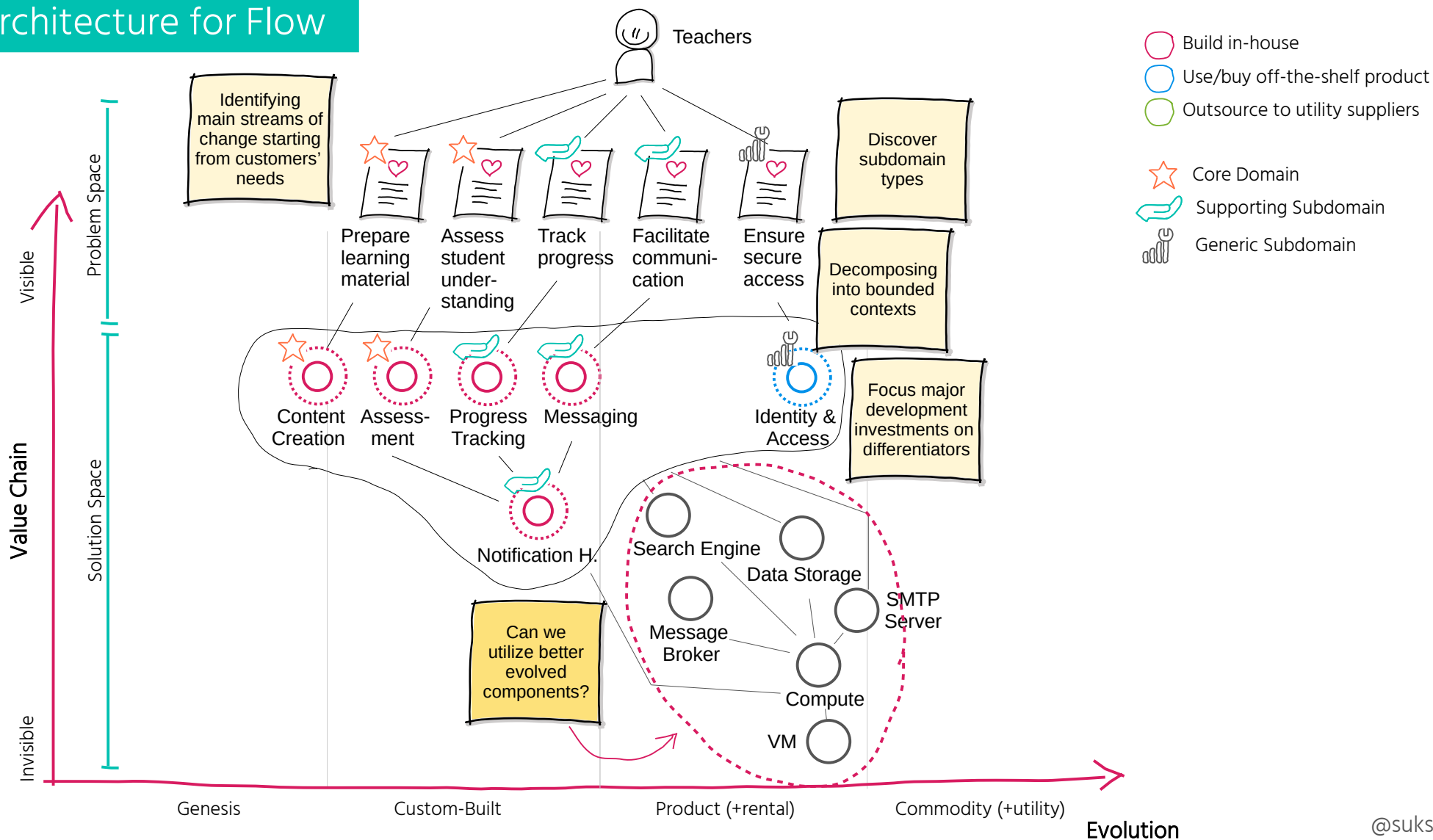
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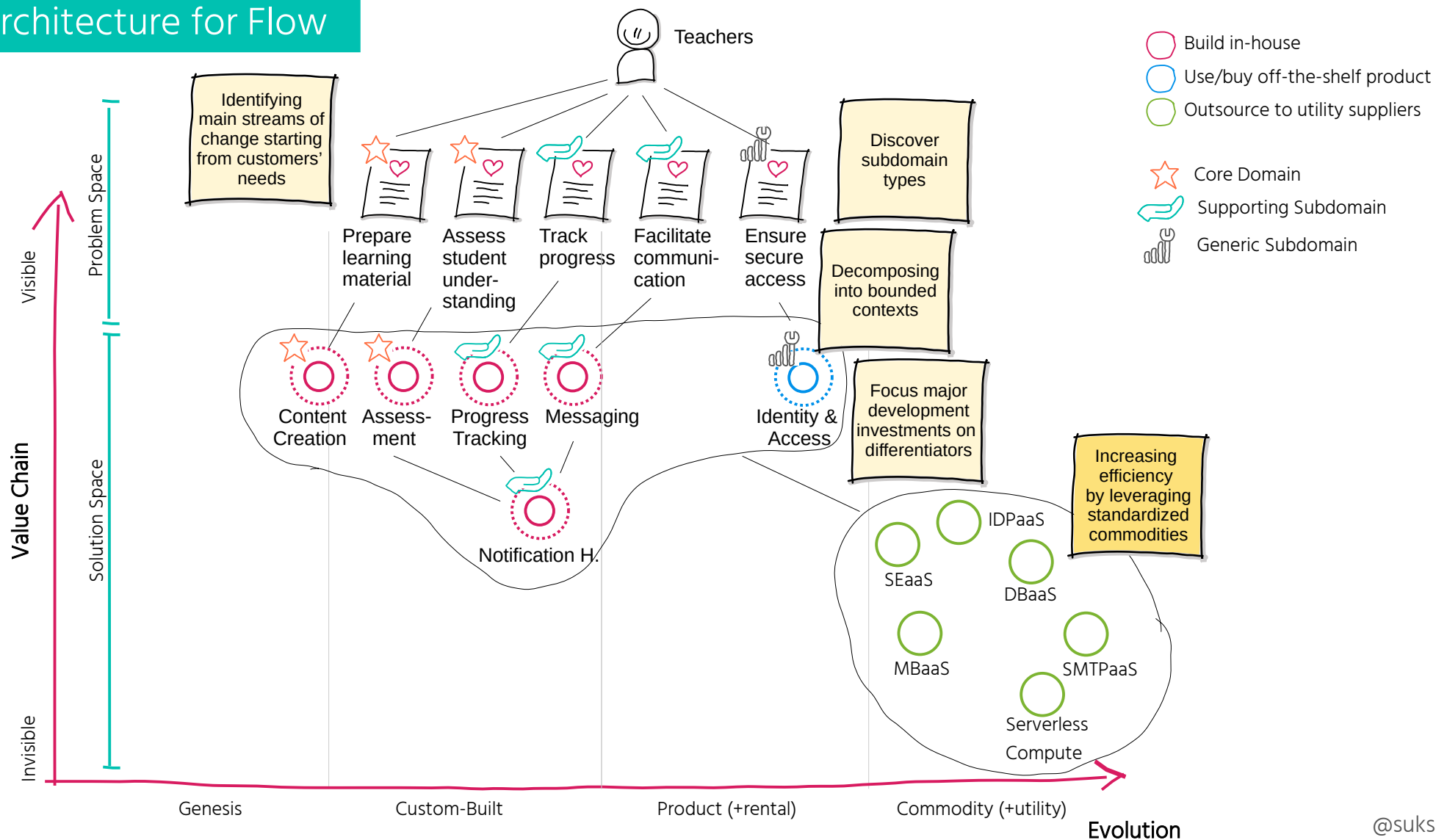
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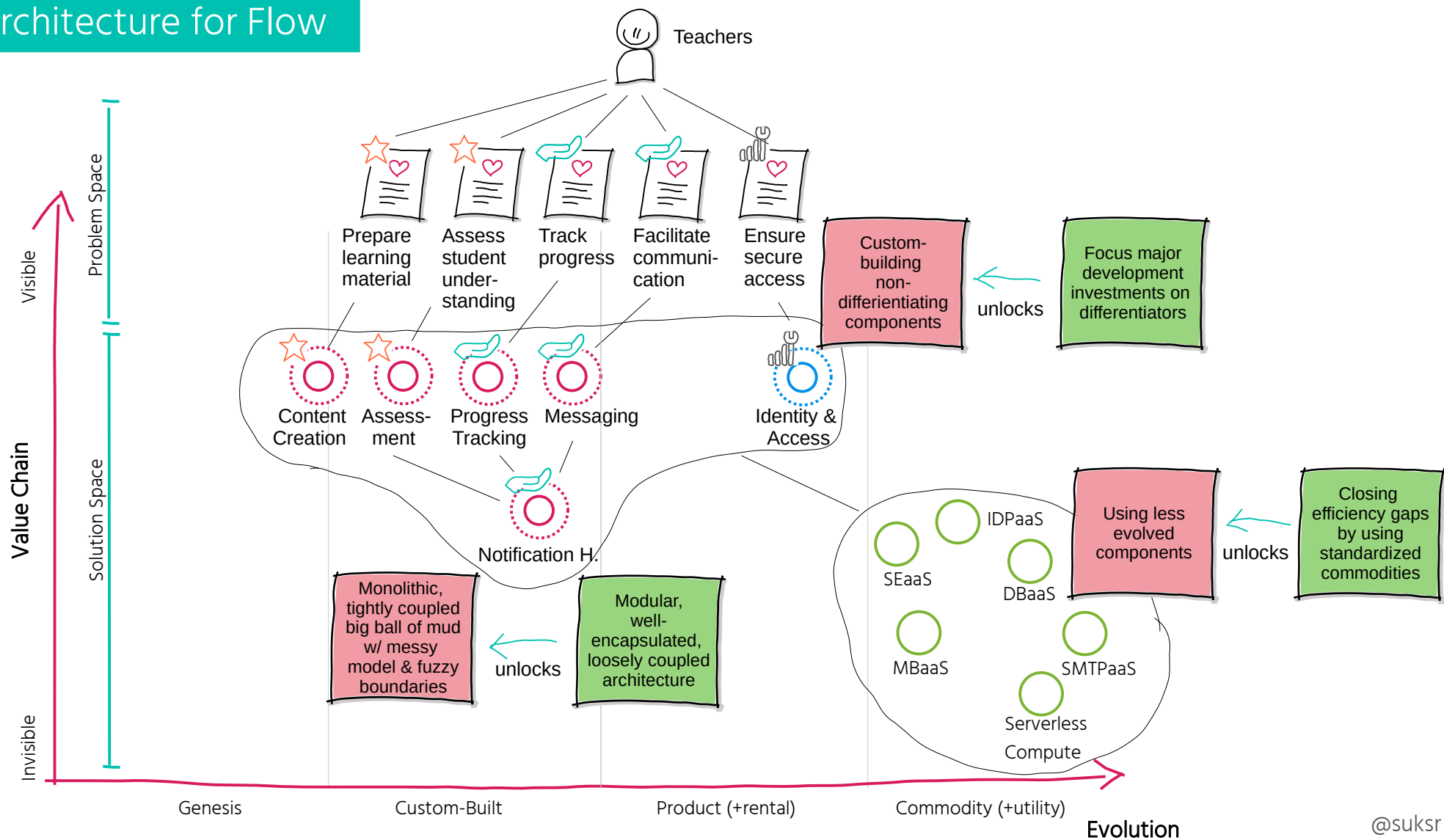
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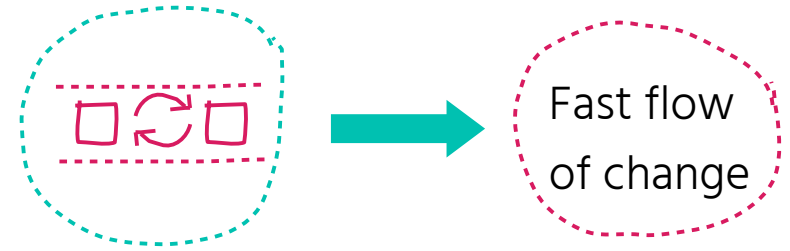
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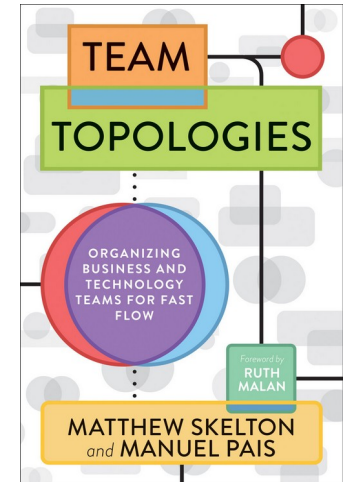
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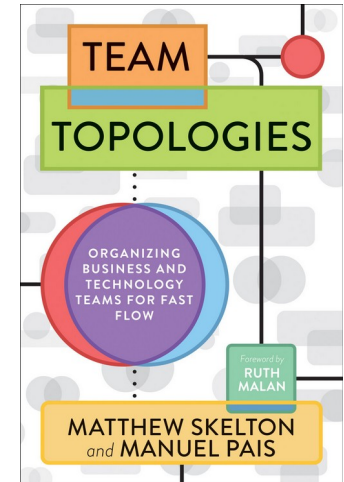
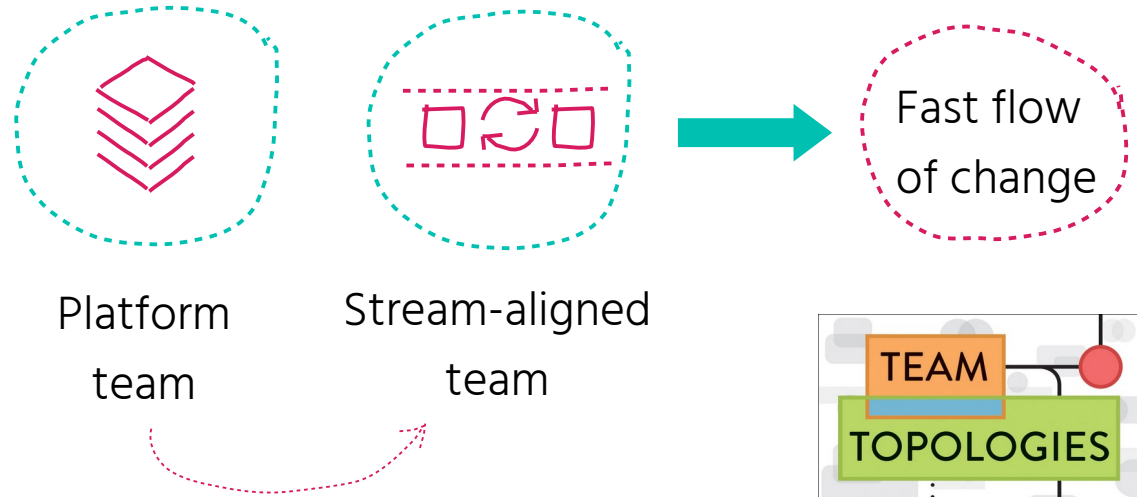
Four Team Types of Team Topologies



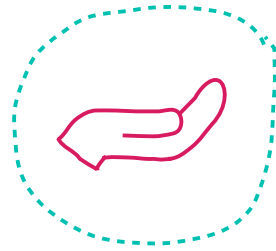
Stream-aligned
team



Four Team Types of Team Topologies



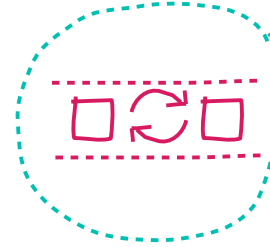
Four Team Types of Team Topologies



Enabling
team



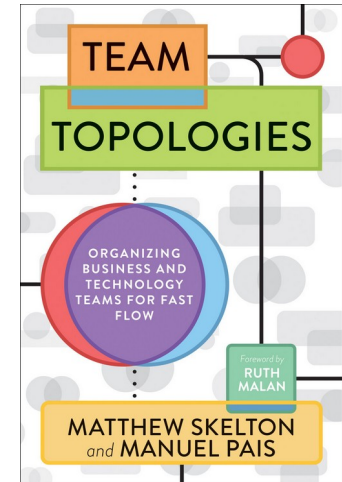
Platform
team



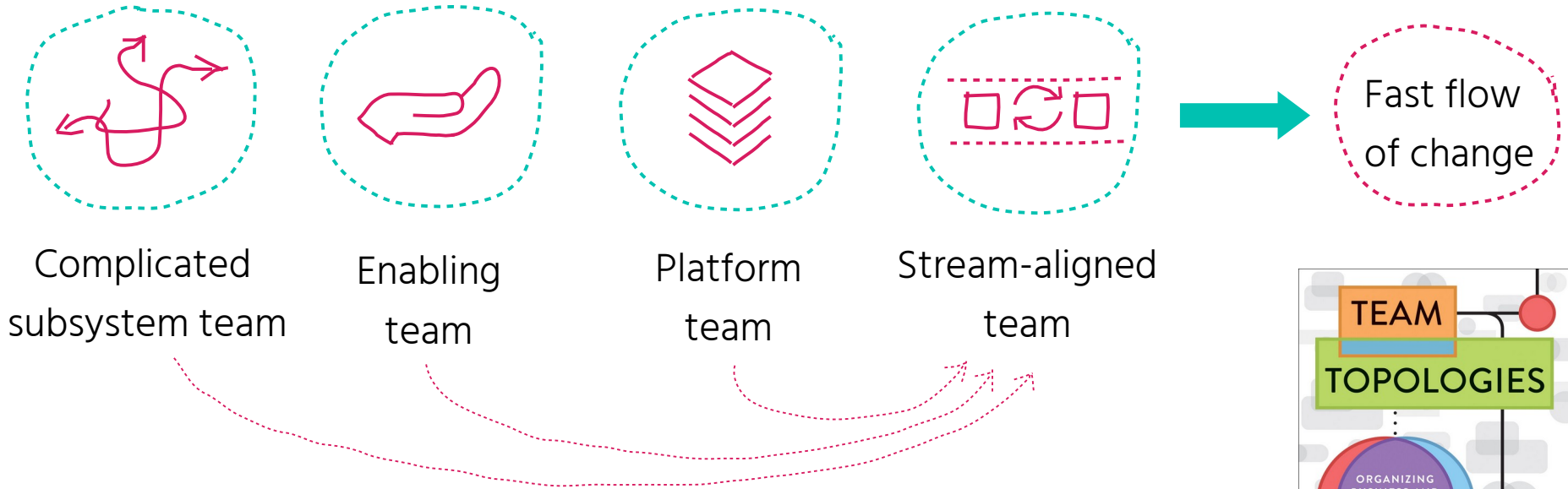
Stream-aligned
team



Fast flow
of change



Four Team Types of Team Topologies



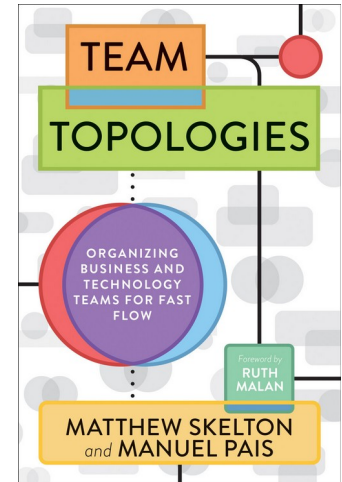
Complicated
subsystem team

Enabling
team

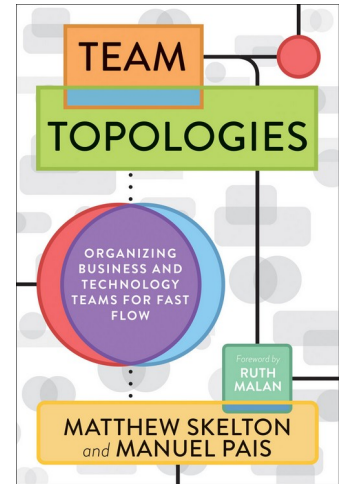
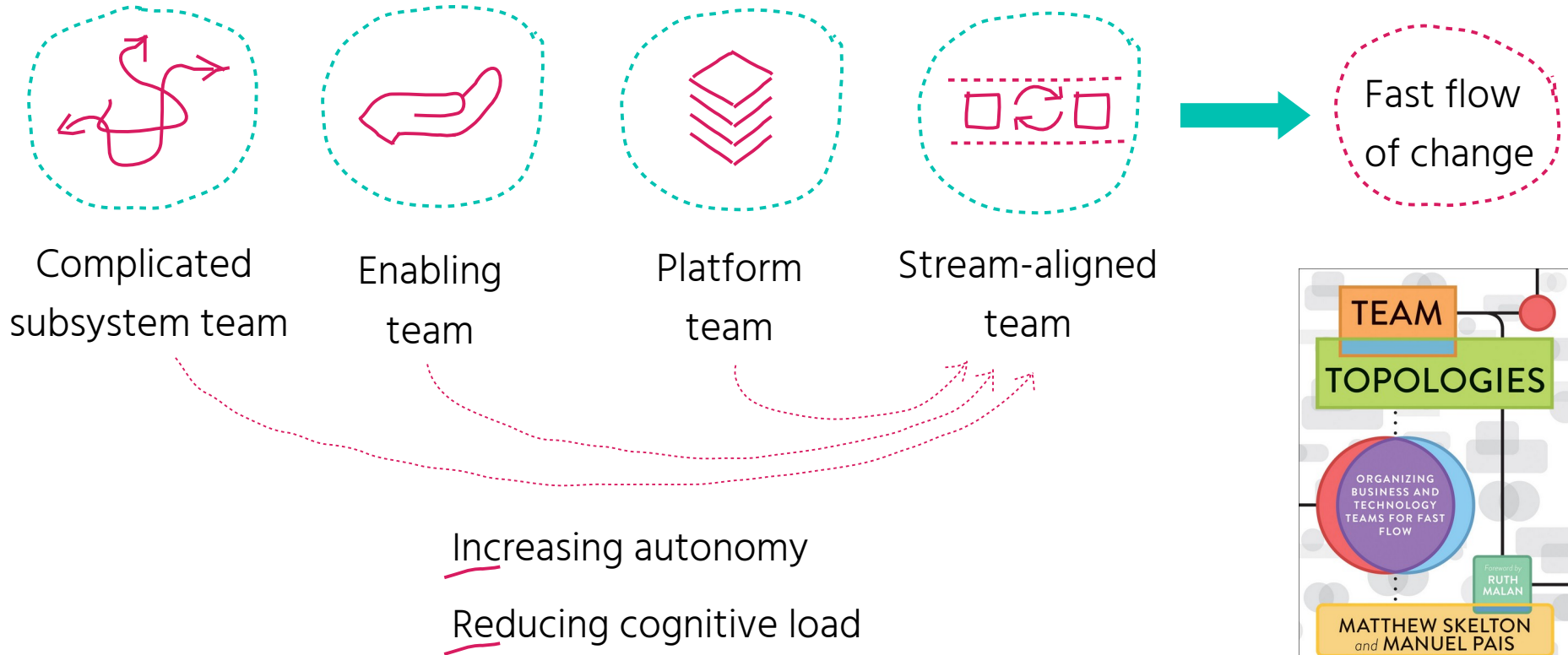
Platform
team

Stream-aligned
team

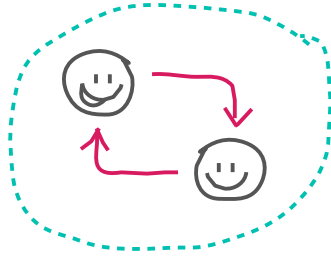
Fast flow
of change



Four Team Types of Team Topologies



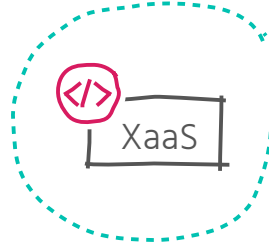
Three Interaction Modes



Collaboration



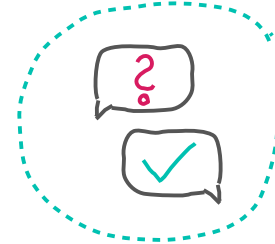
Rapid discovery



X-as-a-Service



Predictable
delivery

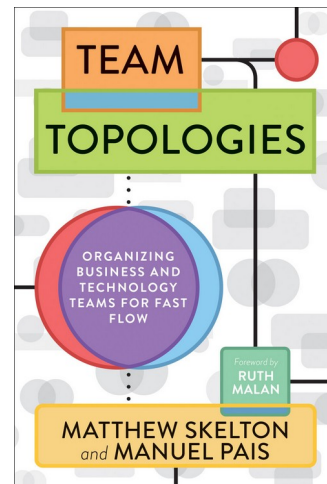
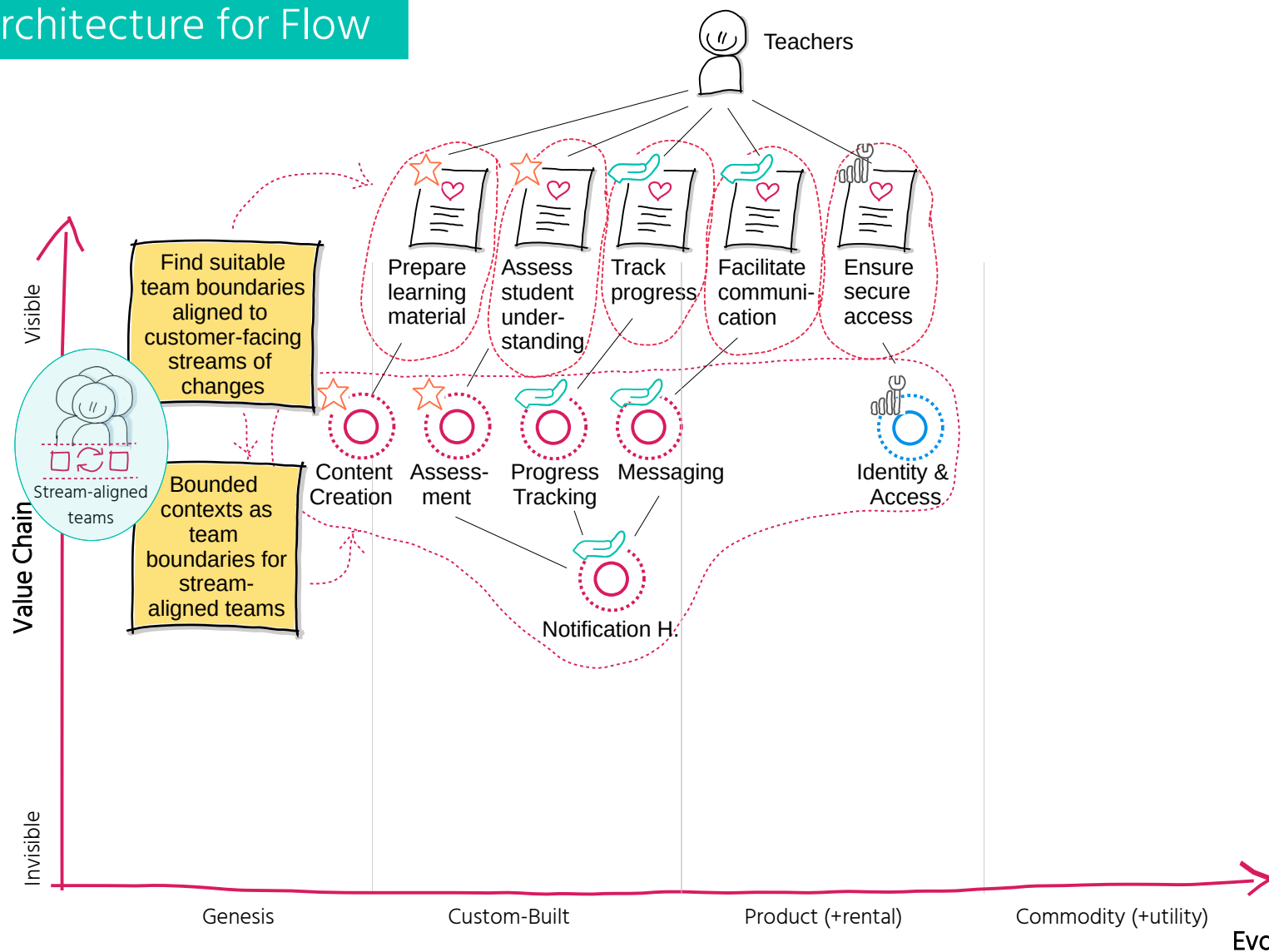


Facilitating

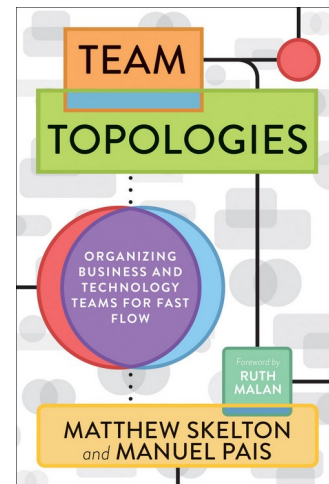
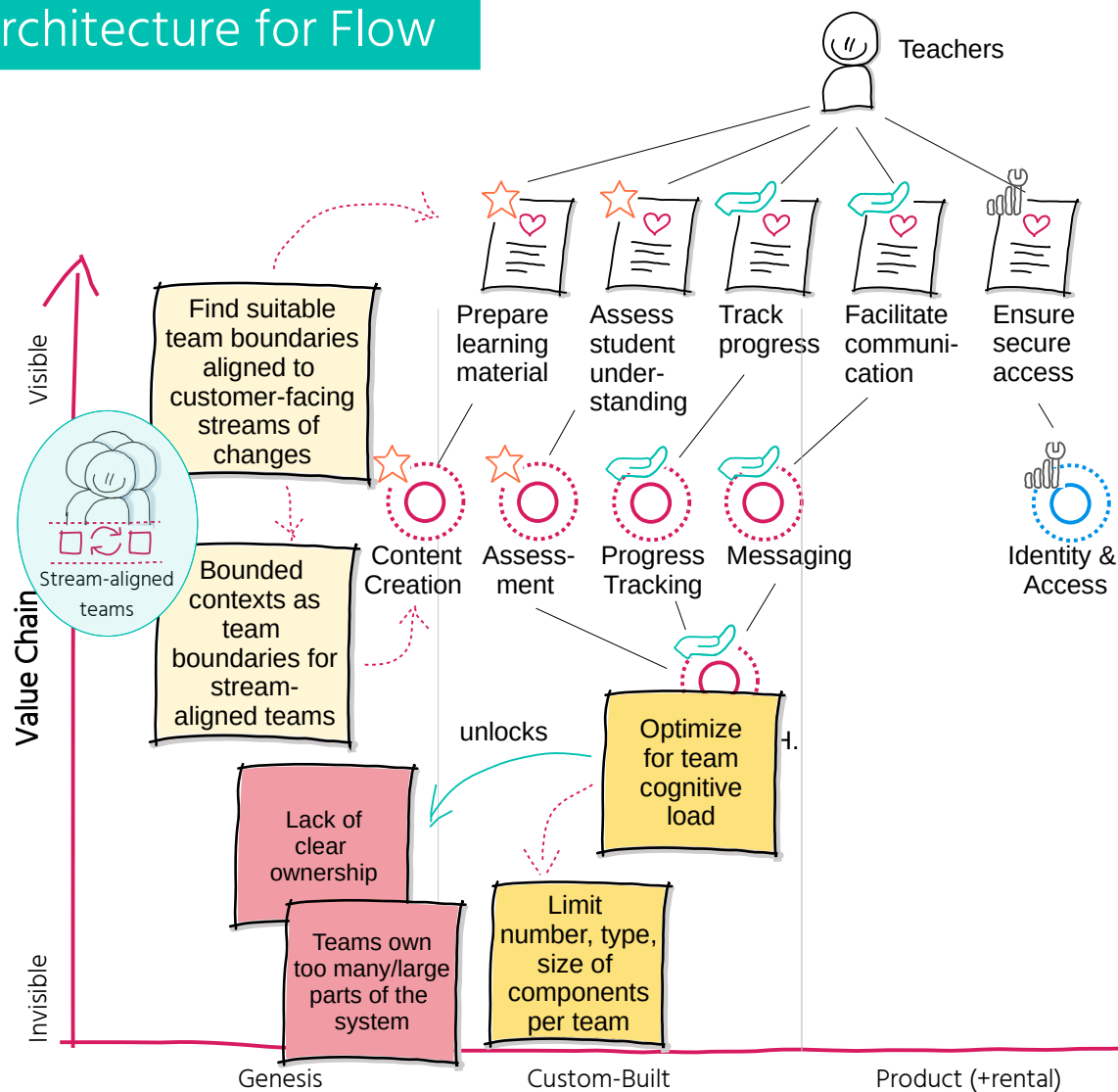


Active help

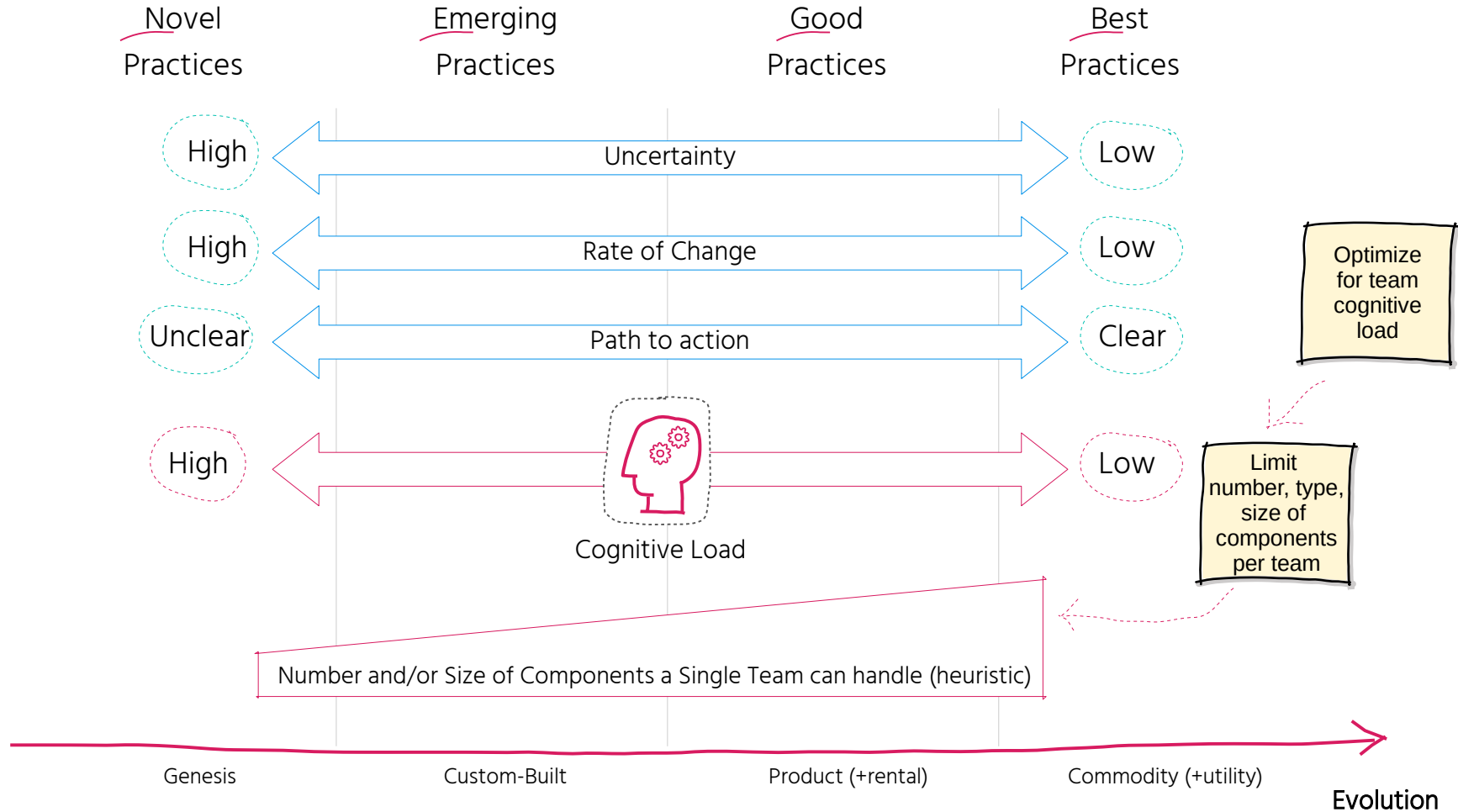
Architecture for Flow



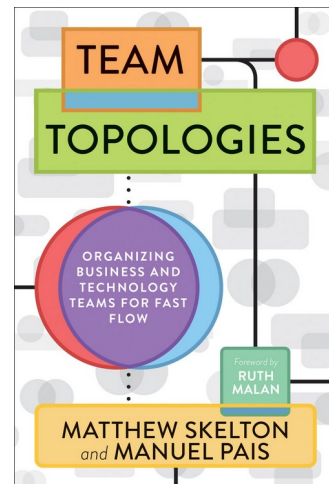
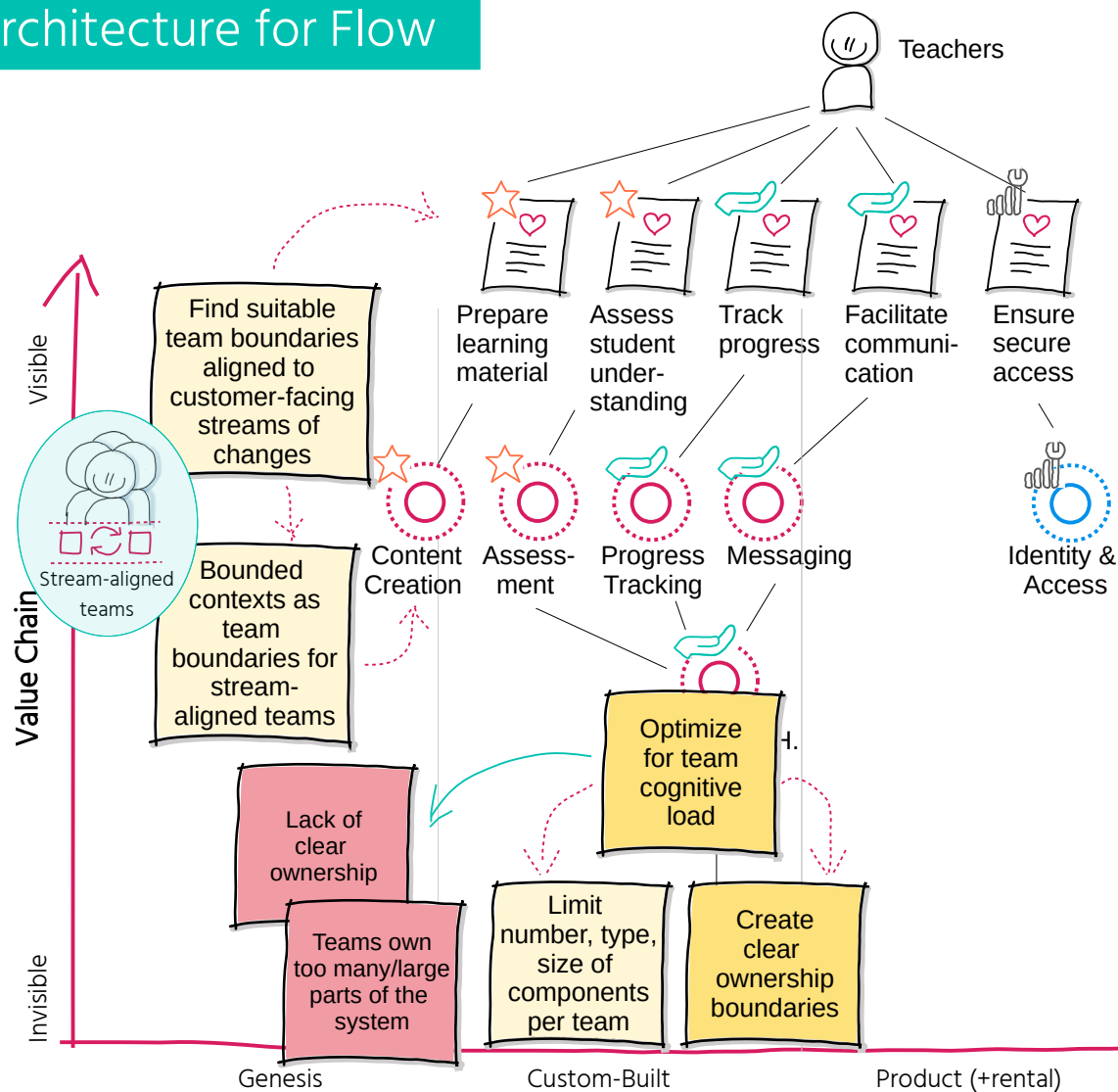
Architecture for Flow



Architecture For Flow



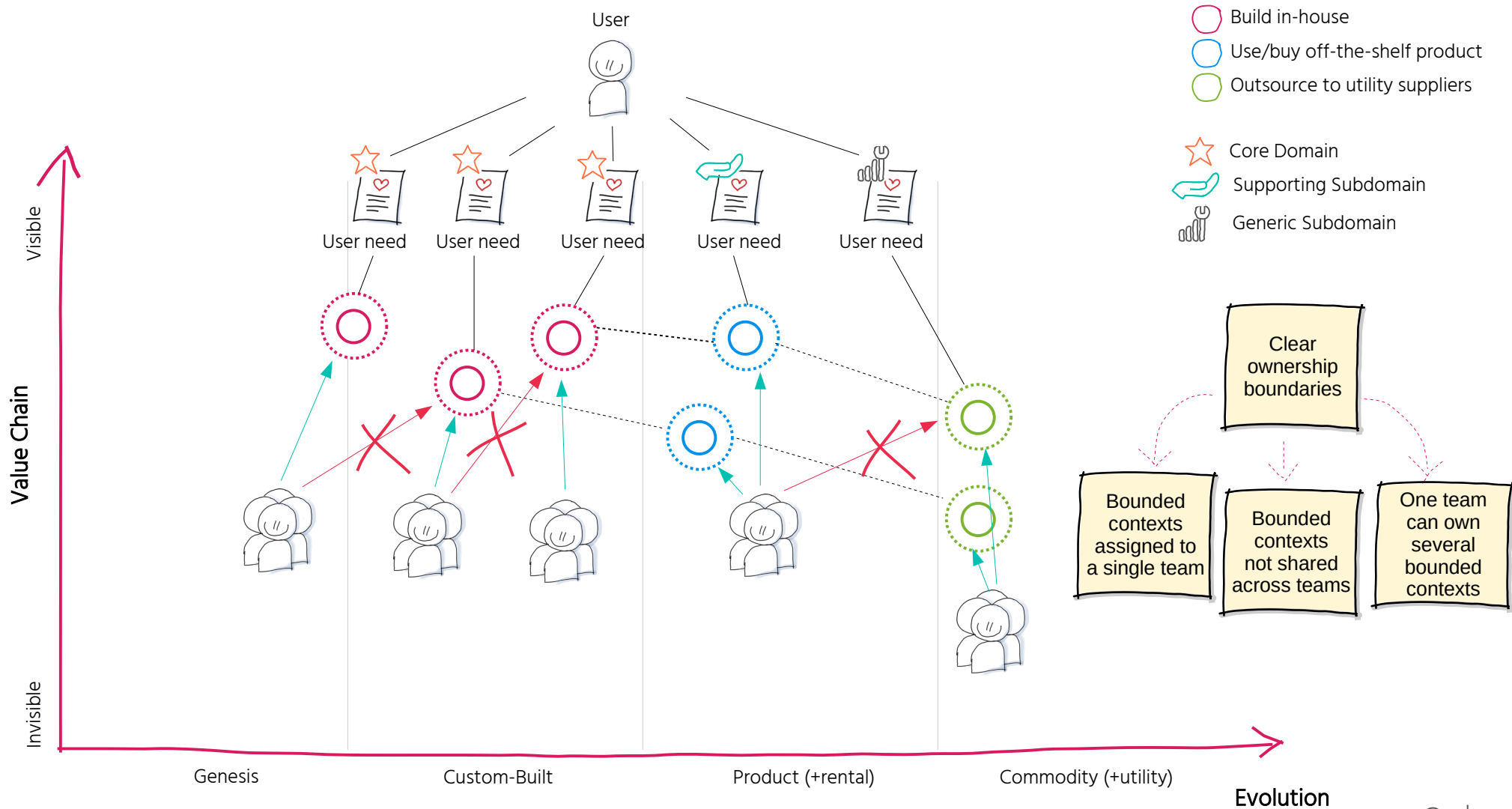
Architecture for Flow



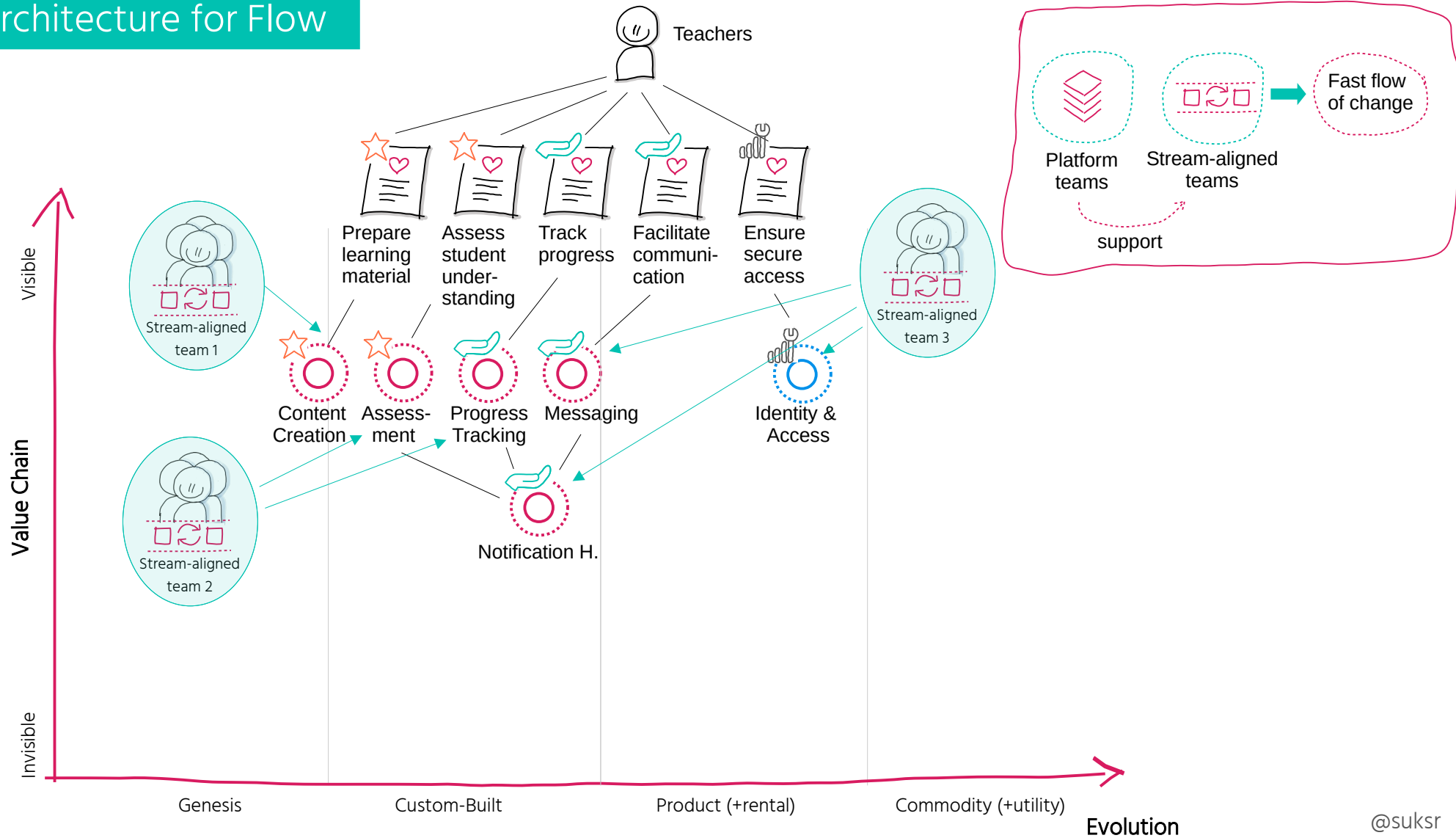
← unlocks blocker

Evolution

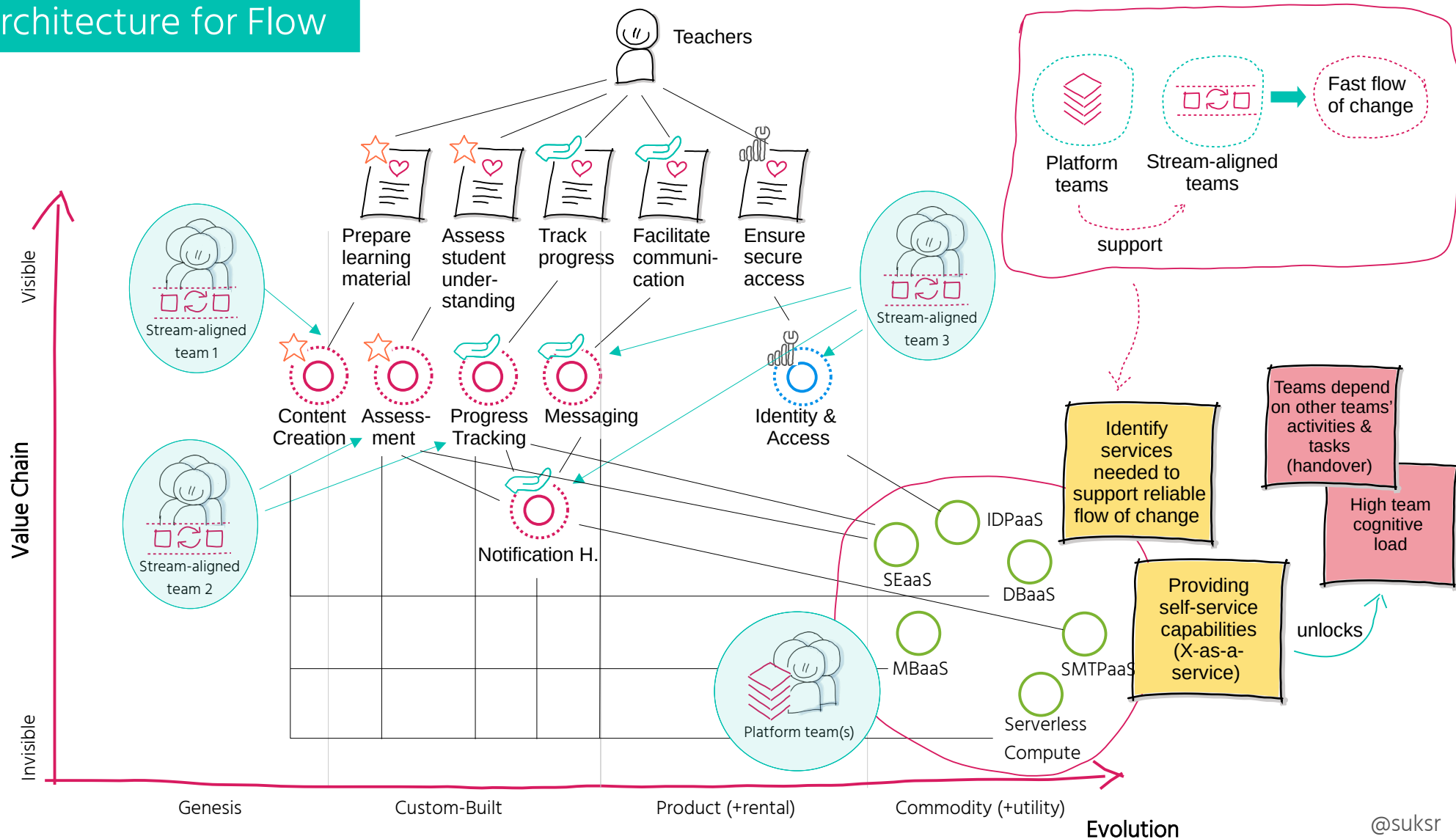
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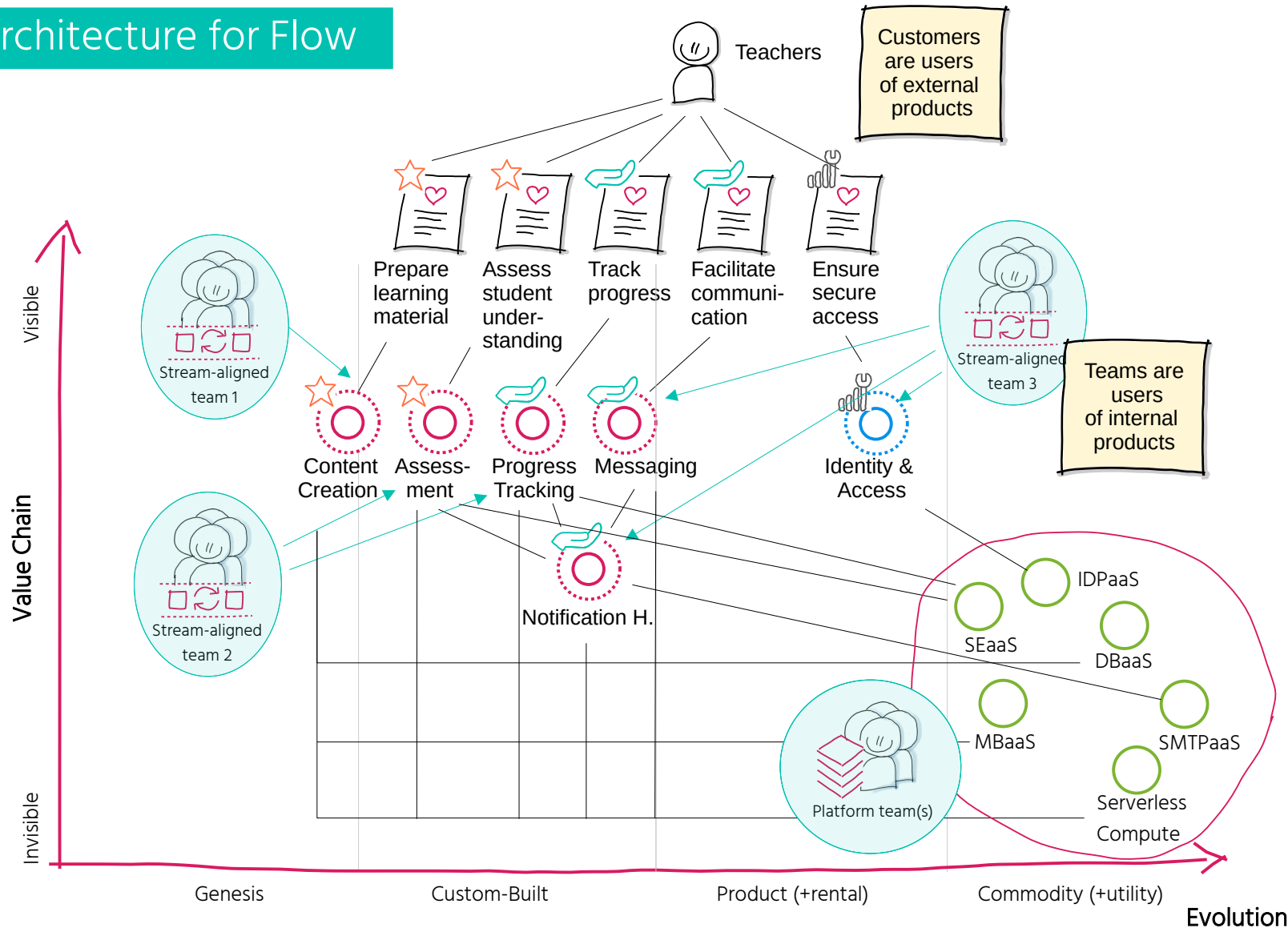
Architecture for Flow



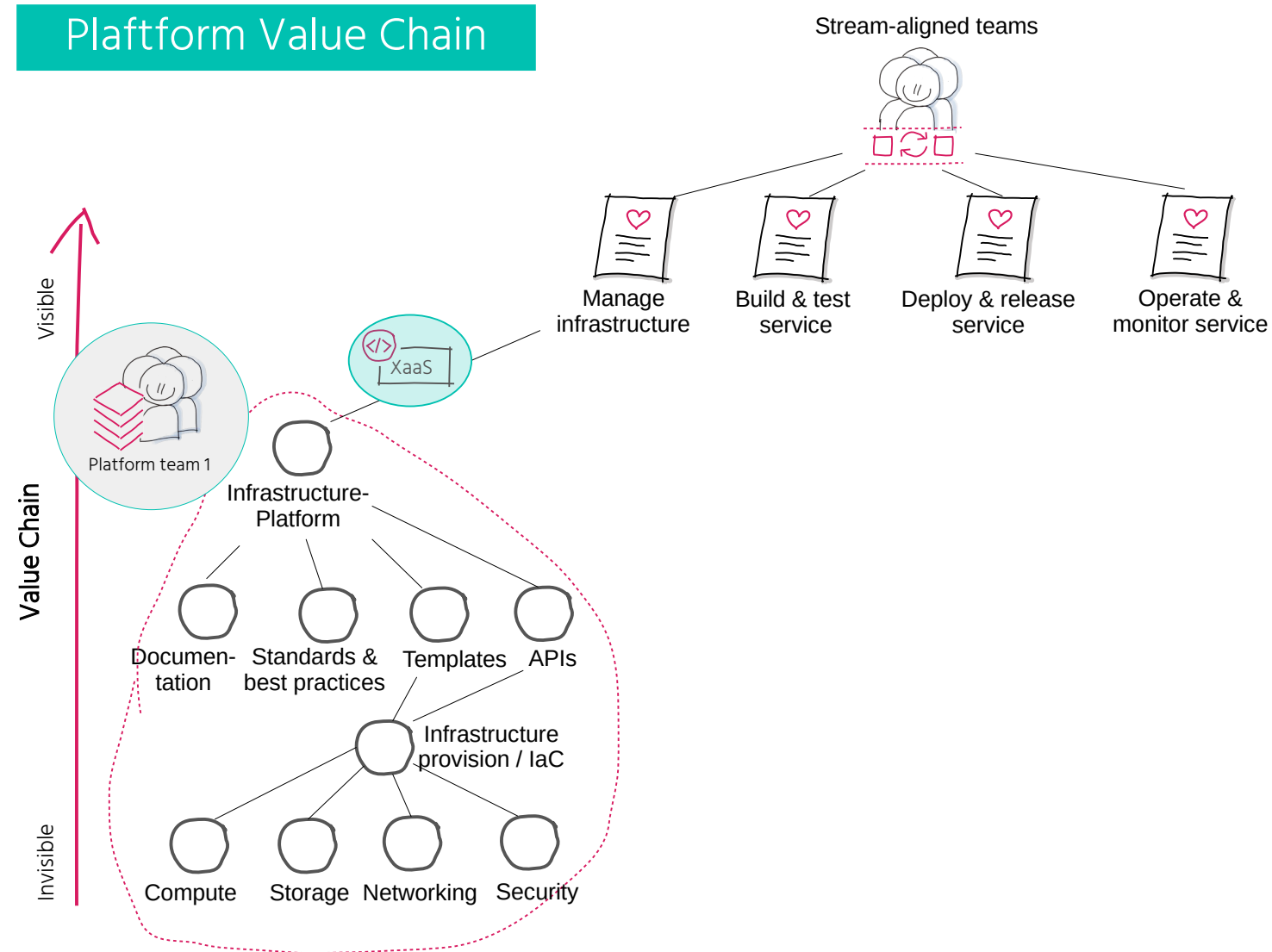
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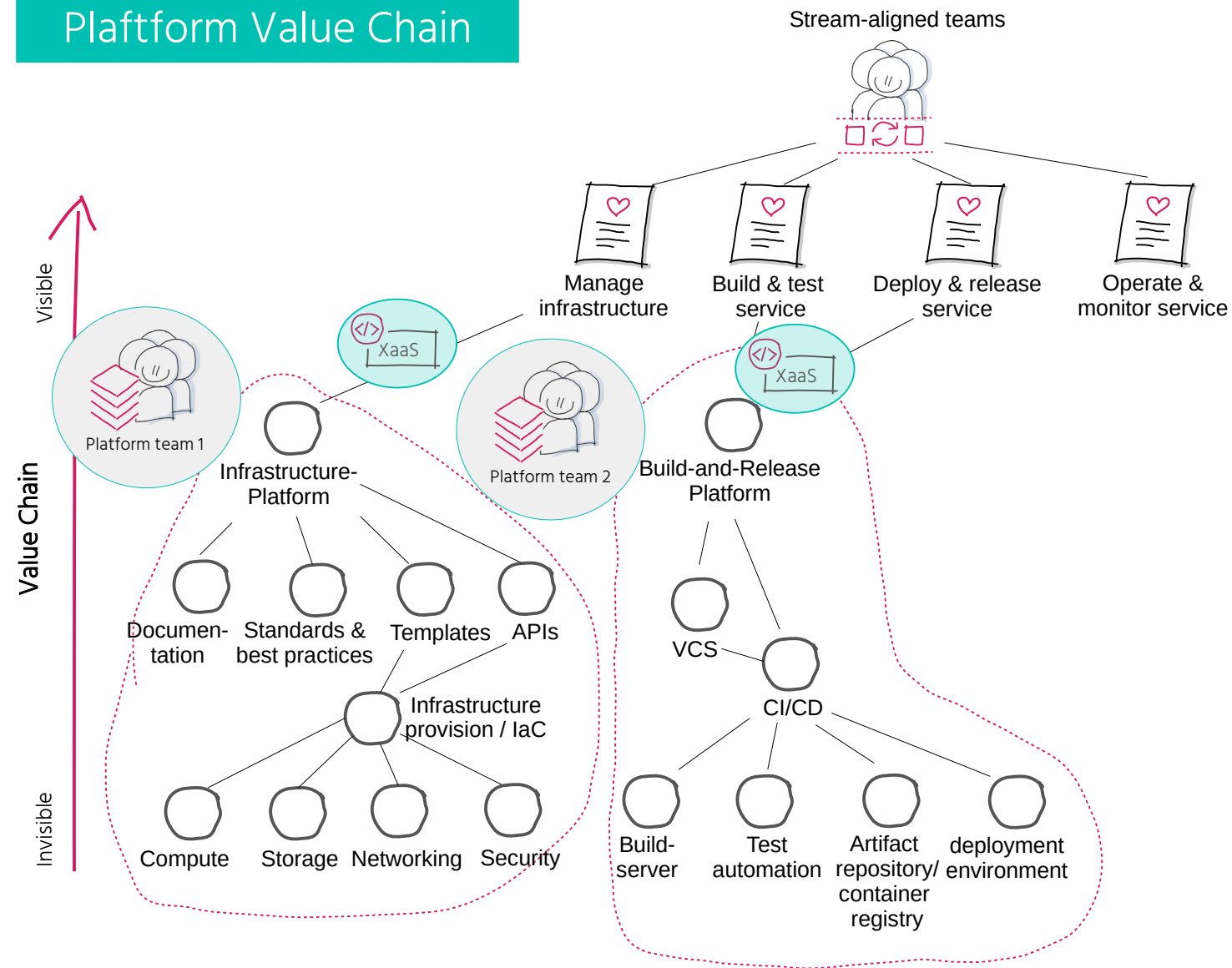
Architecture for Flow



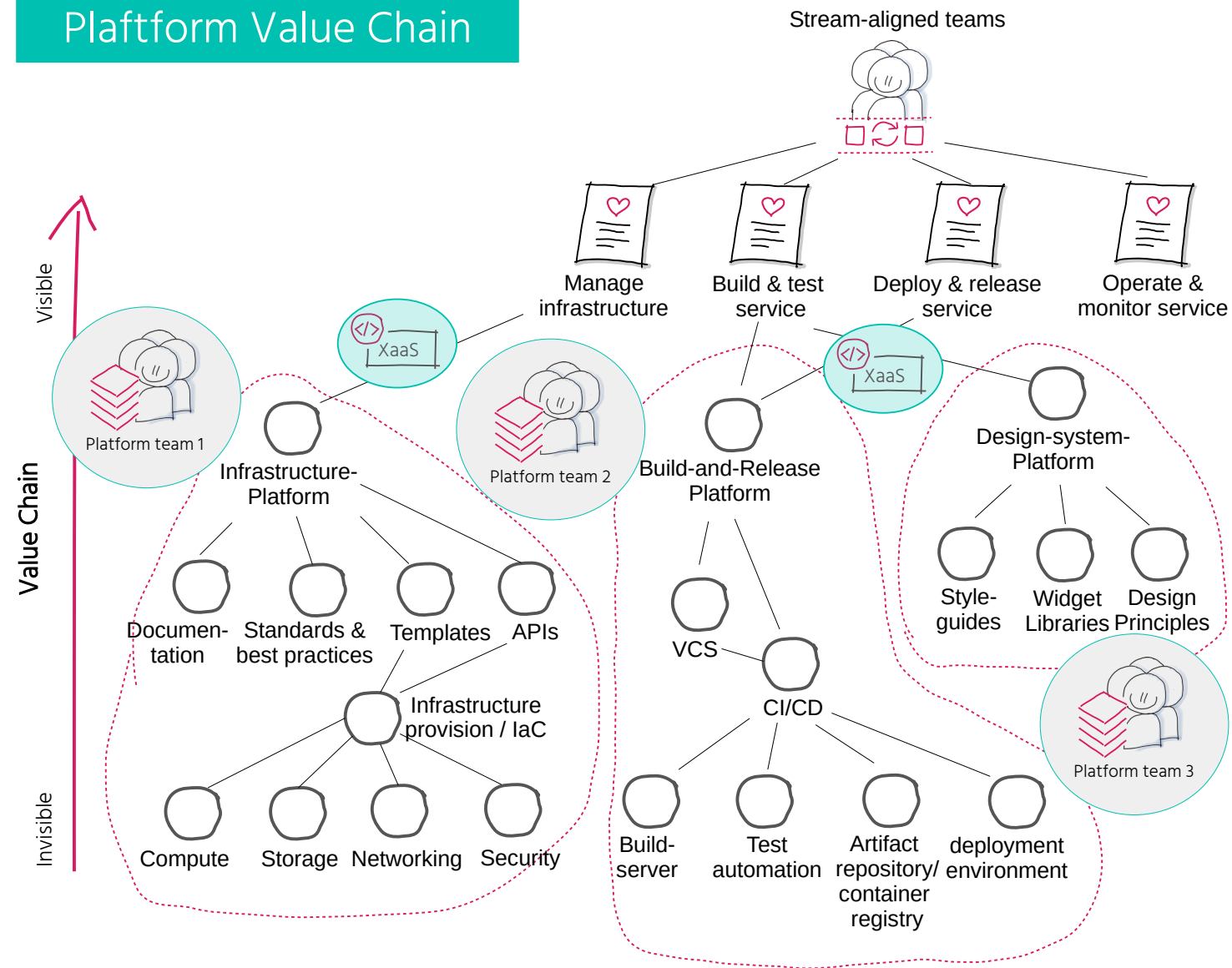
Platform Value Chain



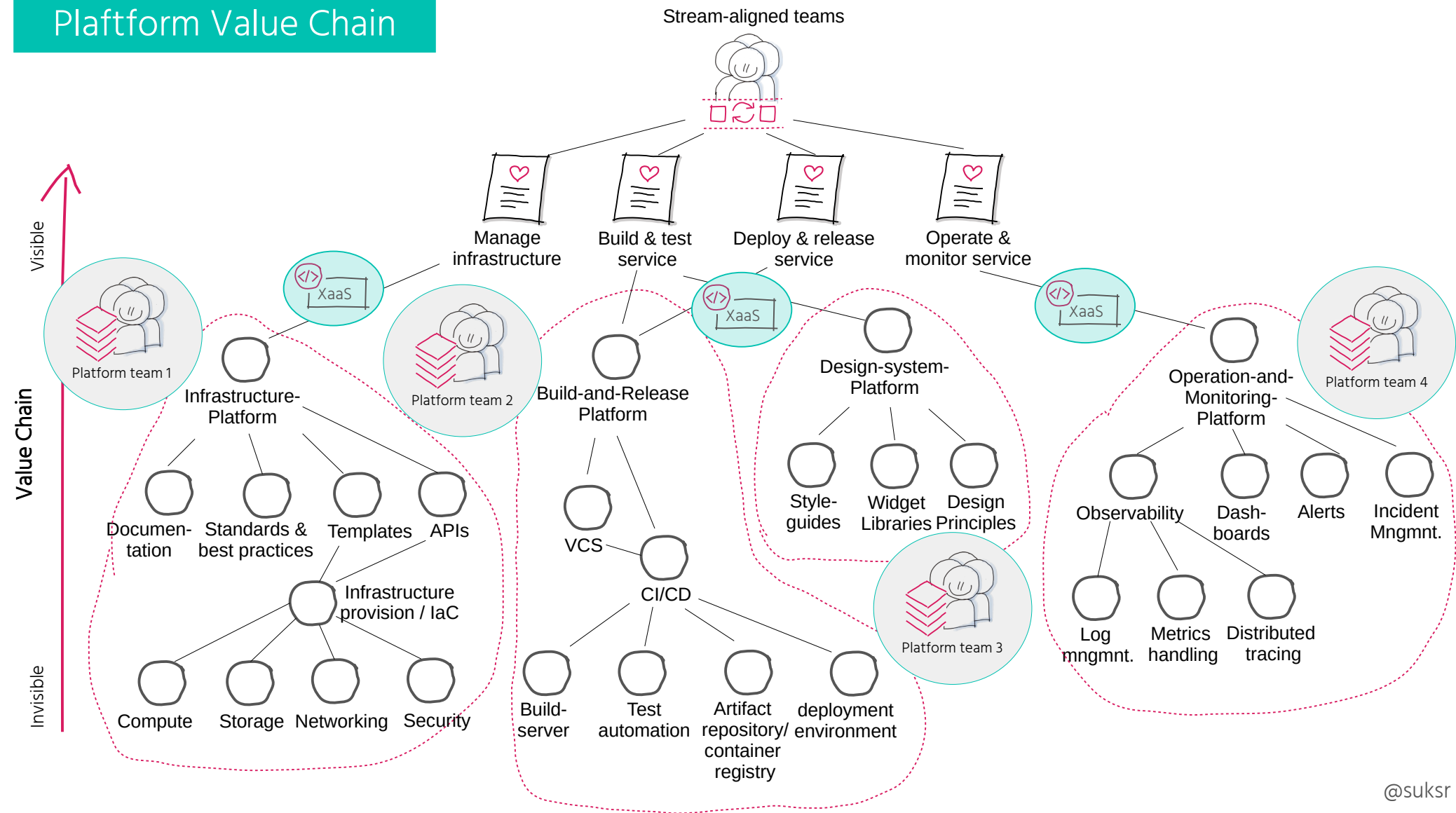
Platform Value Chain



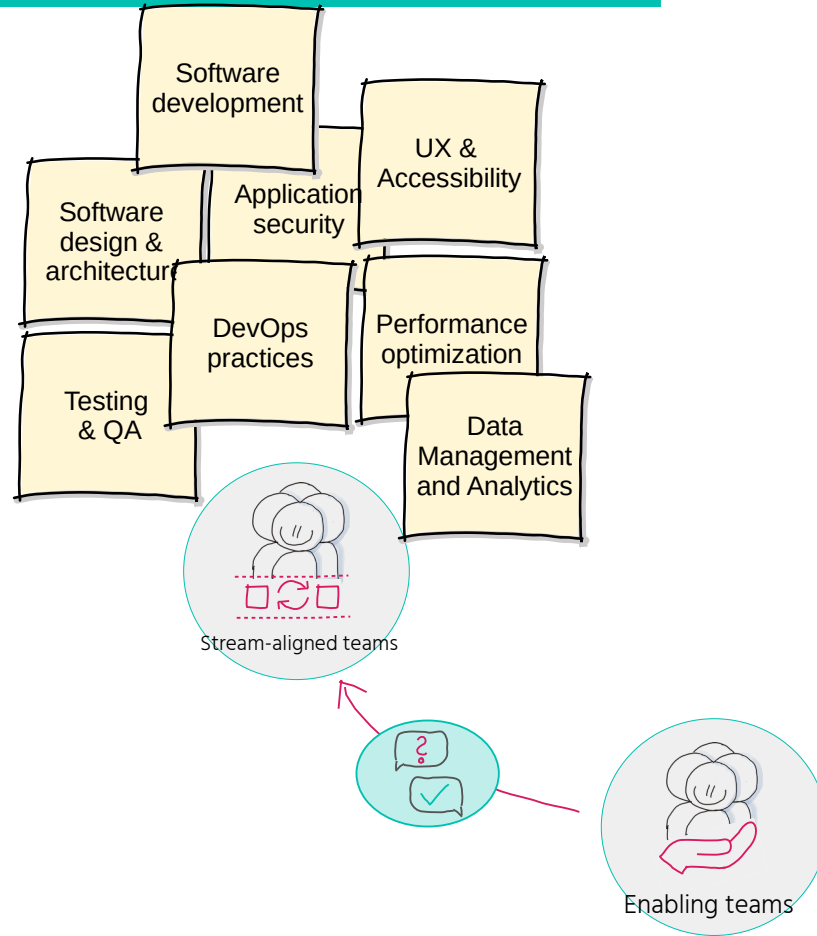
Platform Value Chain



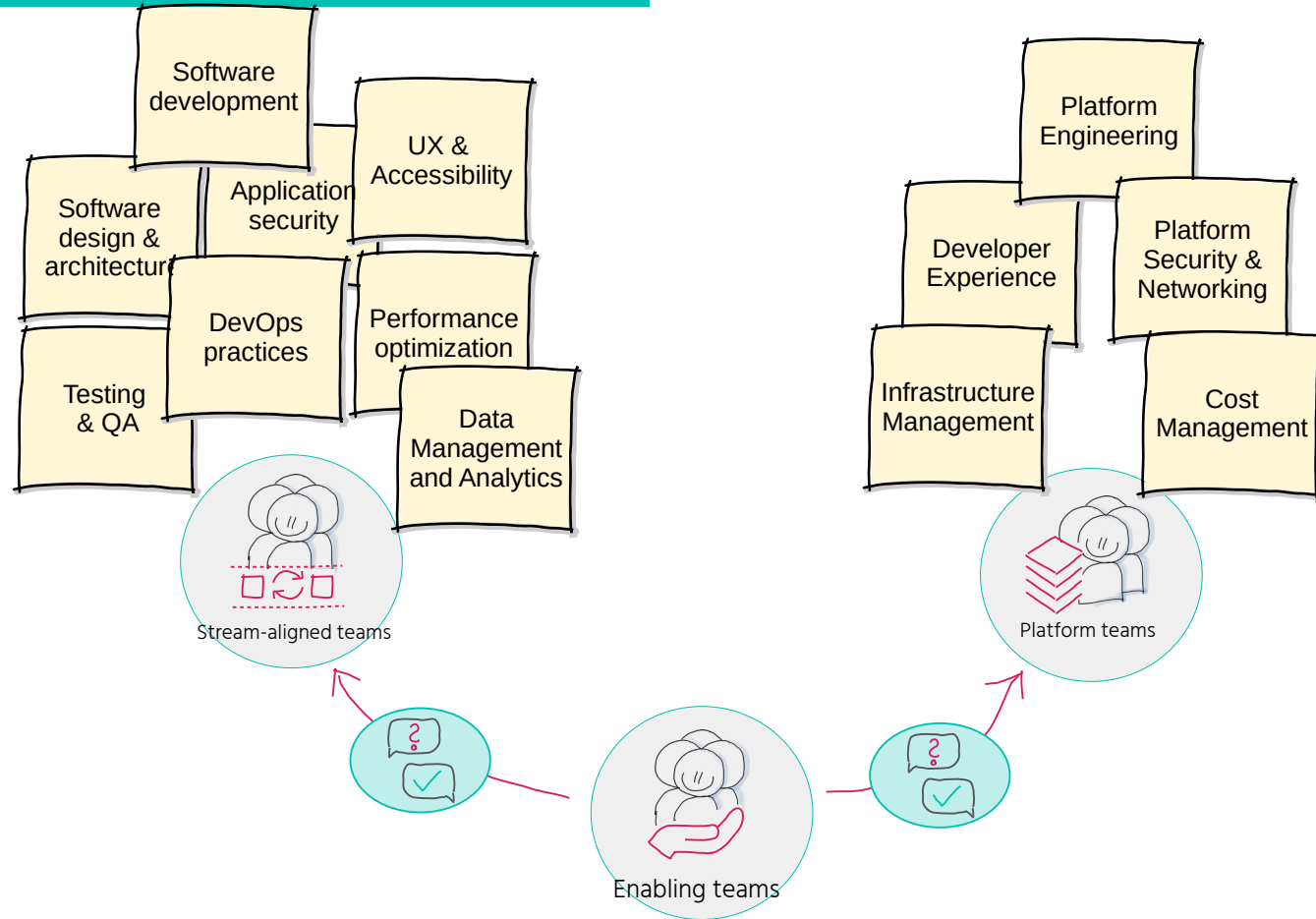
Platform Value Chain



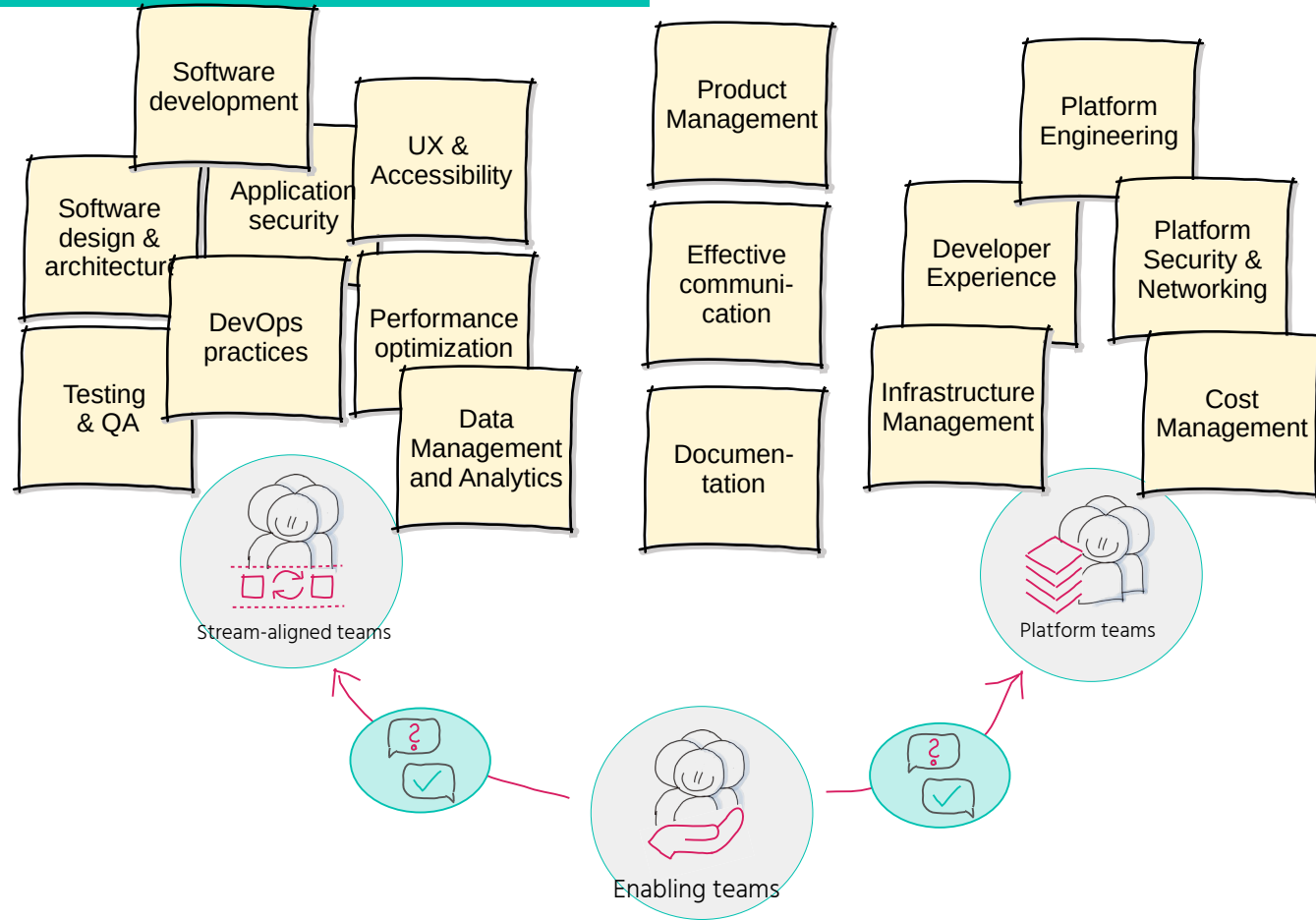
Upskilling Teams on Missing Capabilities



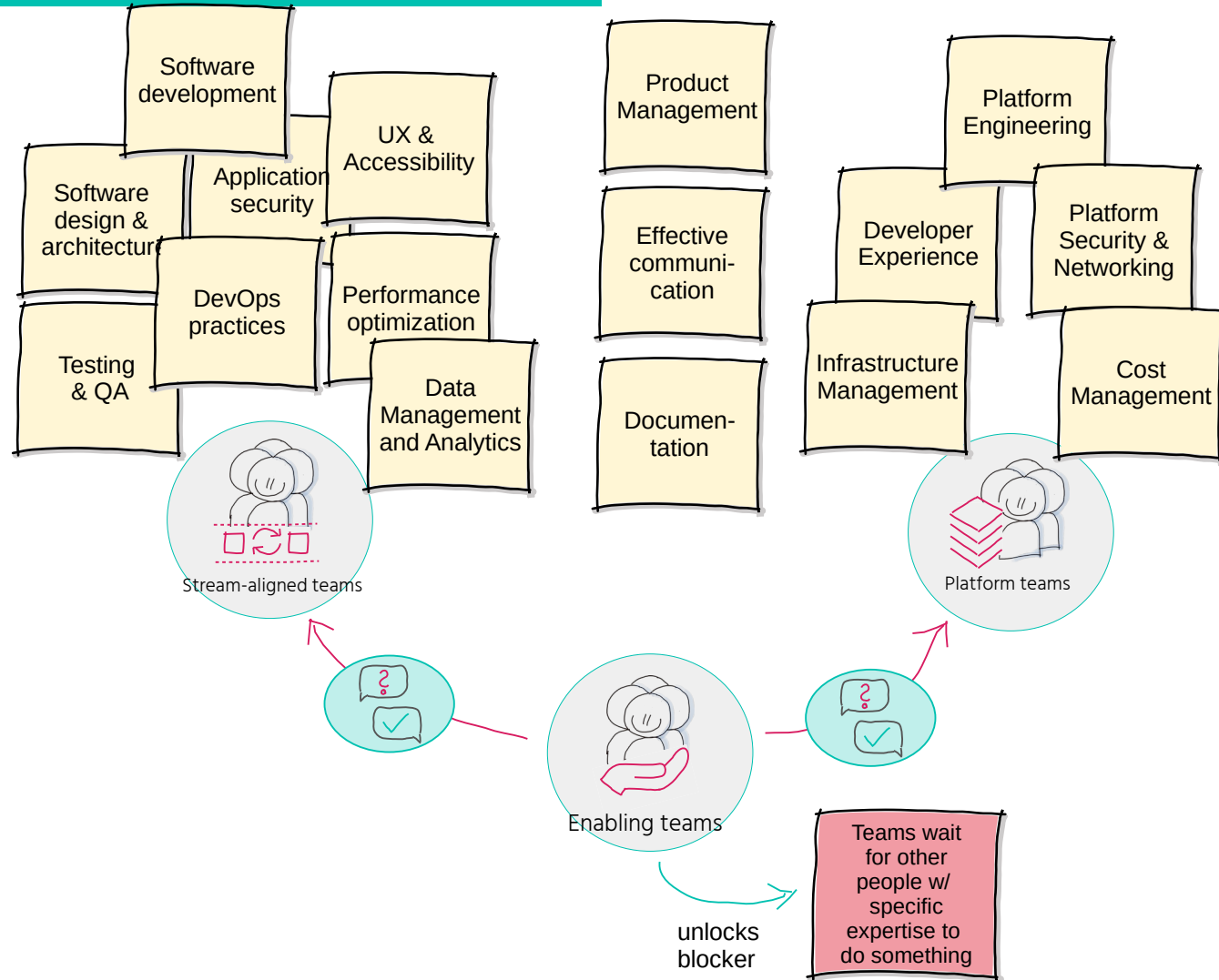
Upskilling Teams on Missing Capabilities



Upskilling Teams on Missing Capabilities

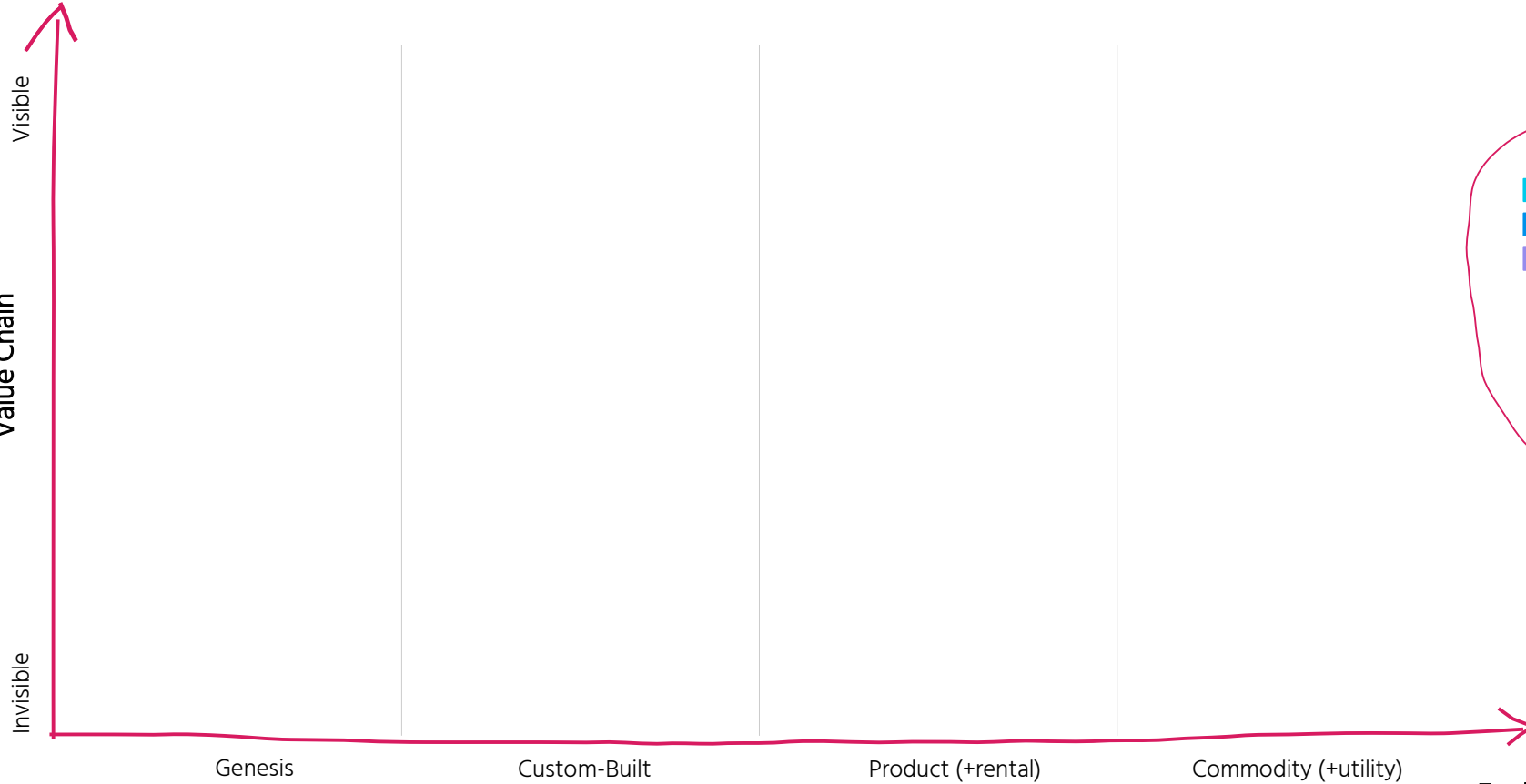


Upskilling Teams on Missing Capabilities

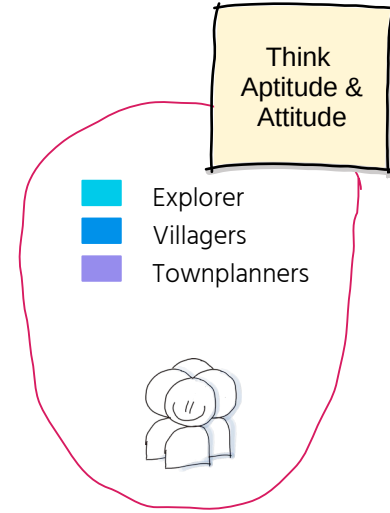


A Mix of Mindsets per Team

Value Chain

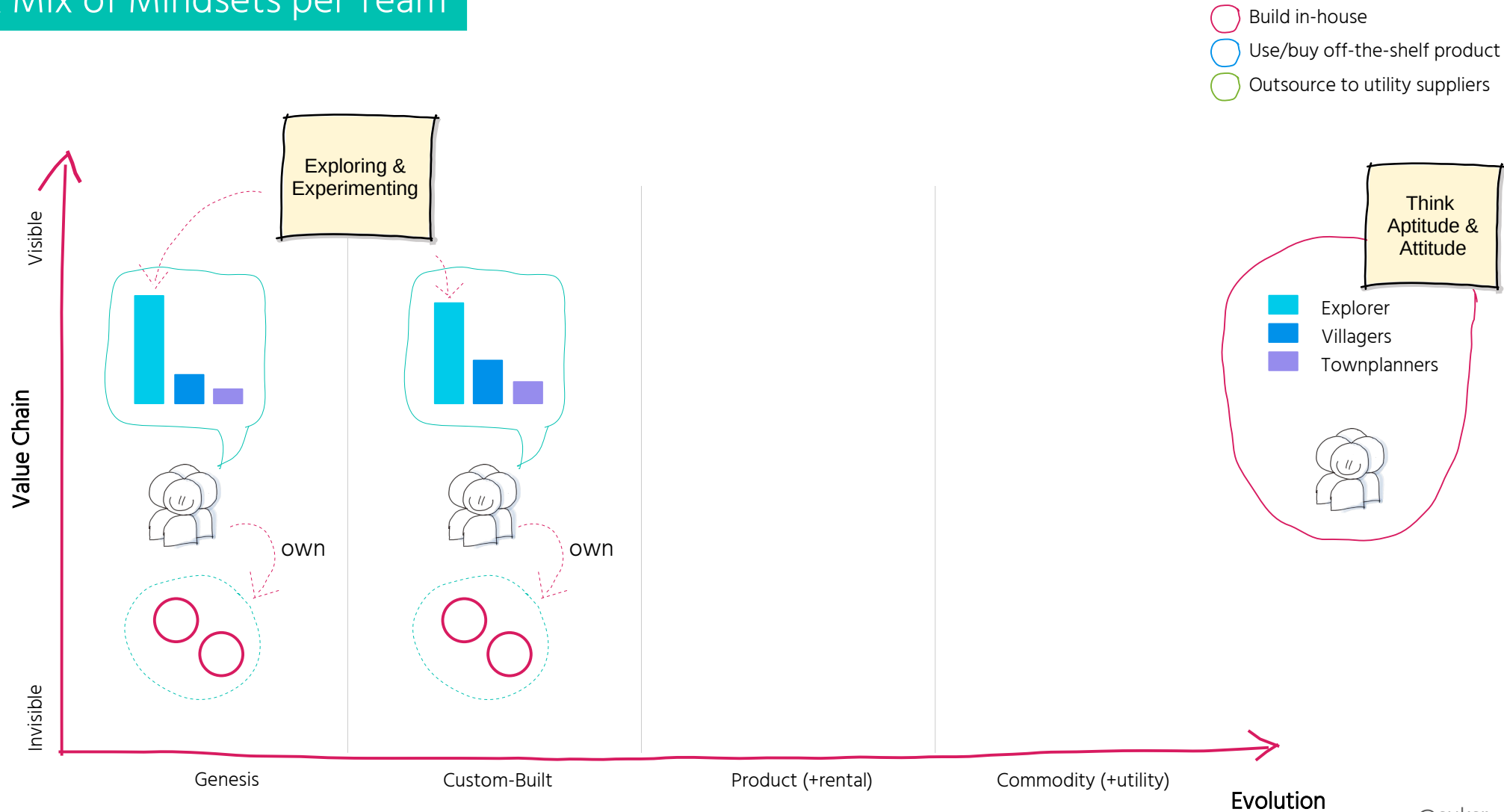


- Build in-house
- Use/buy off-the-shelf product
- Outsource to utility suppliers

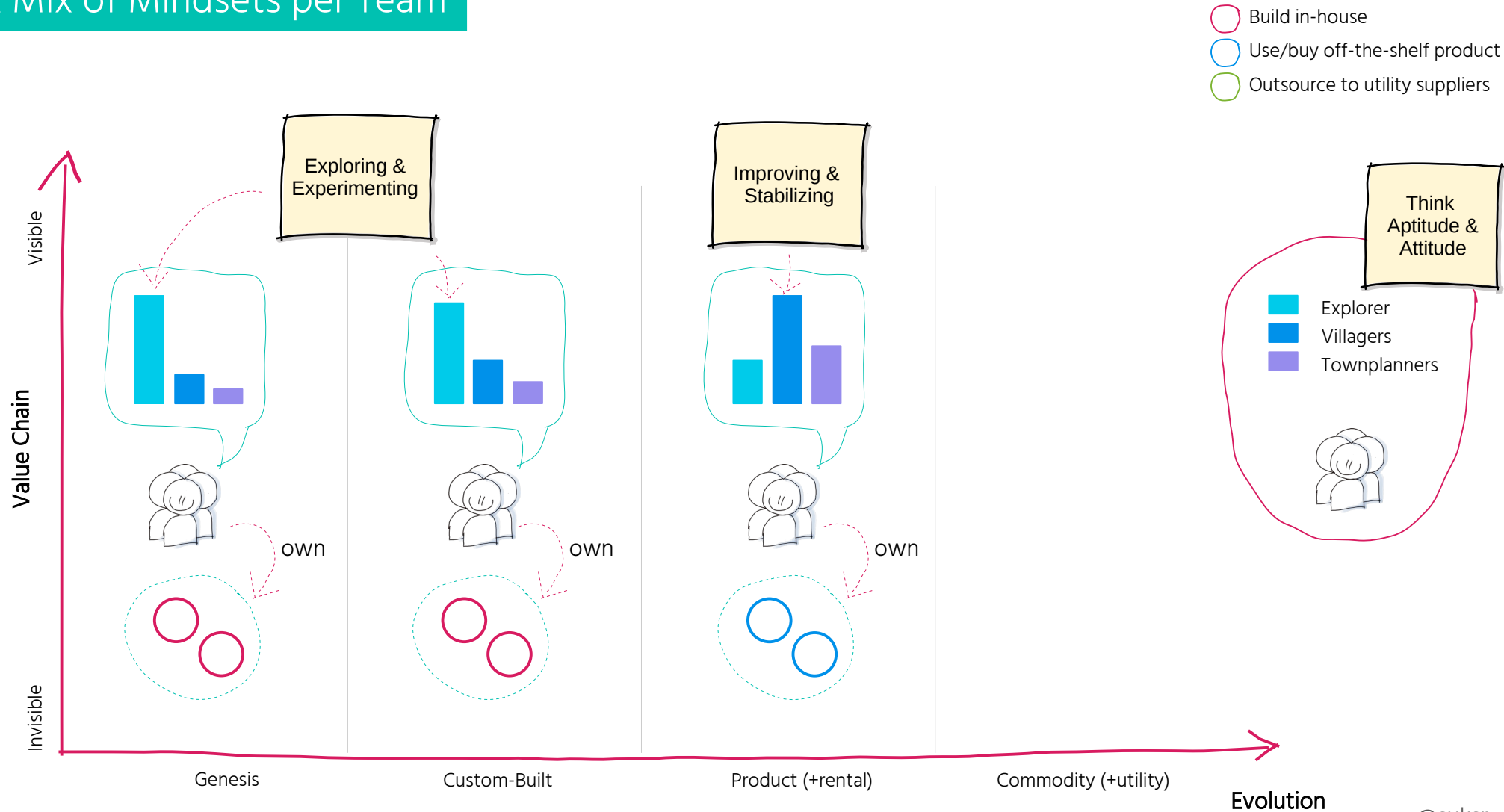


Evolution

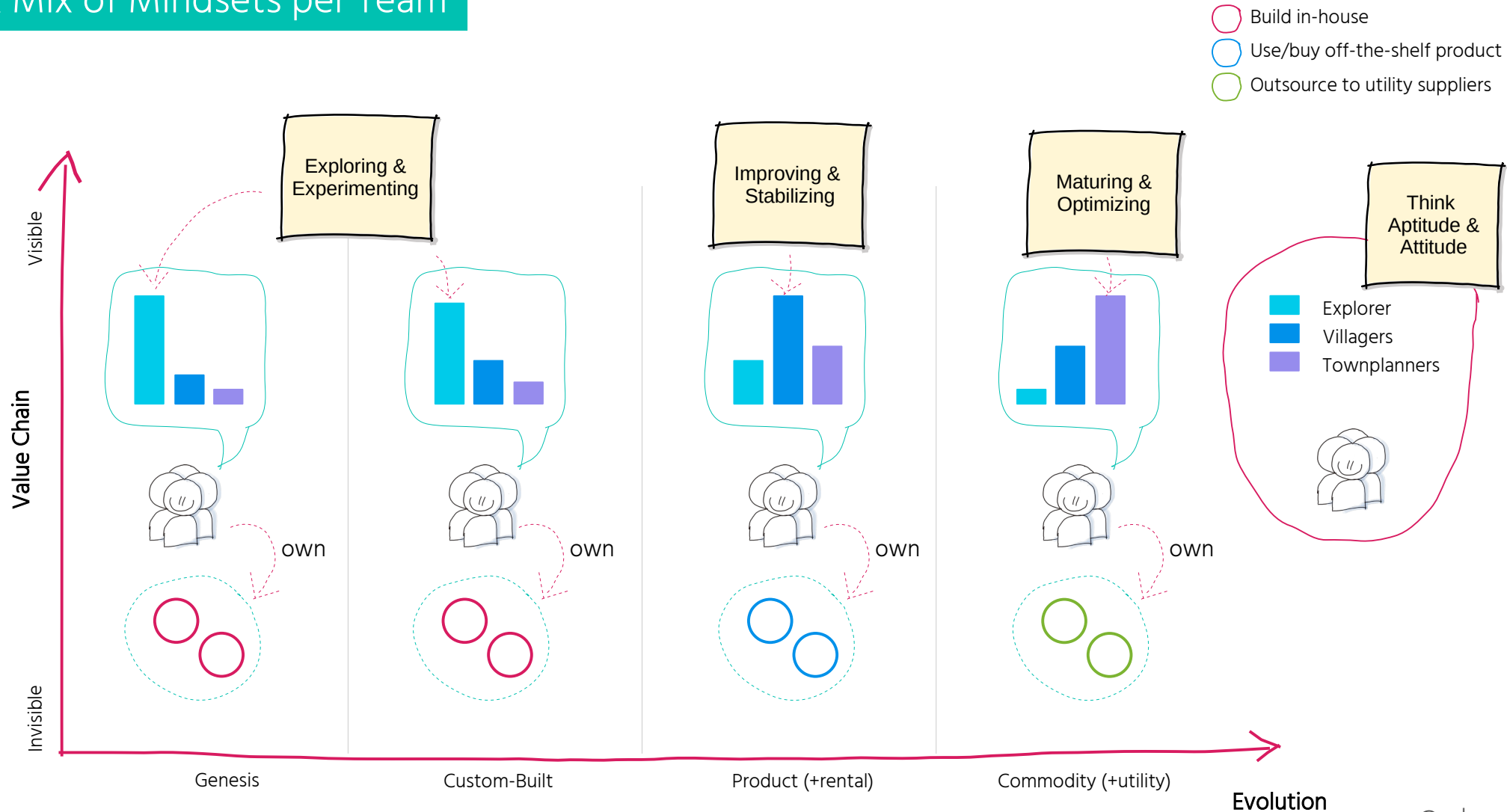
A Mix of Mindsets per Team



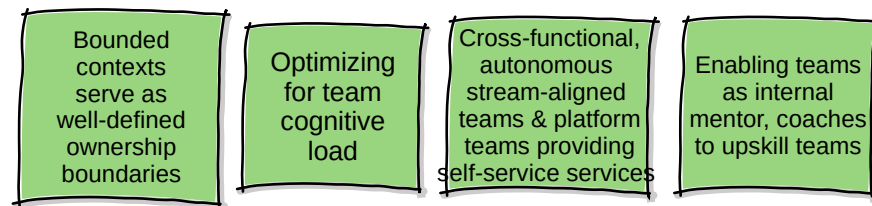
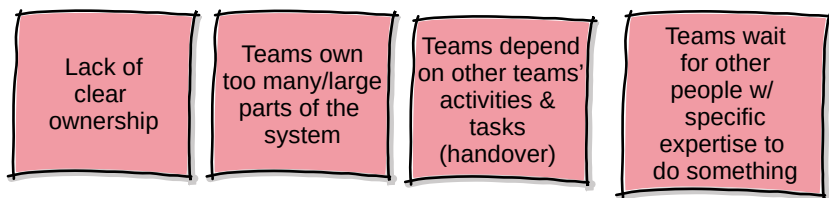
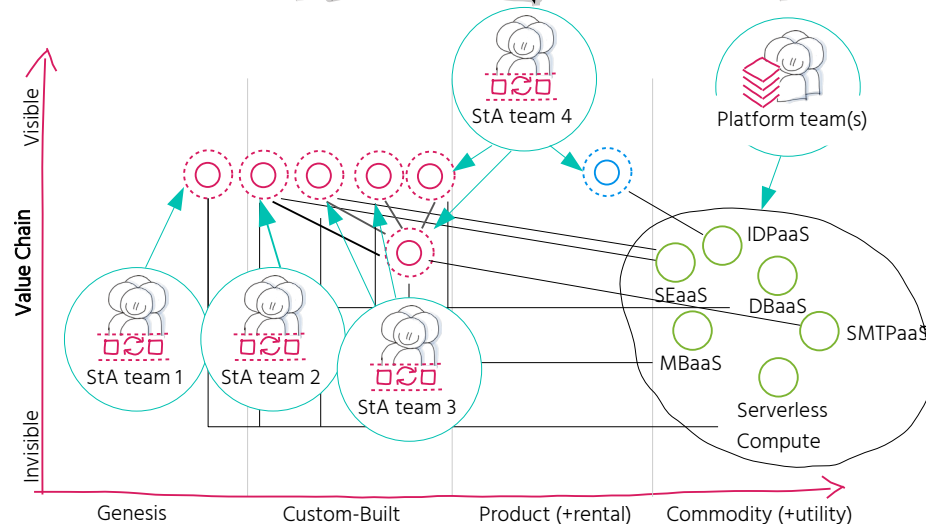
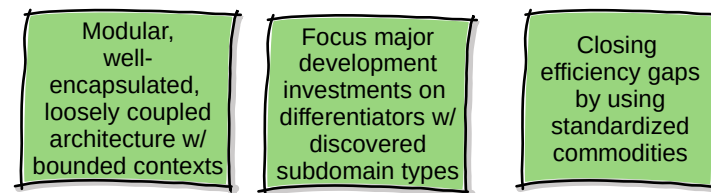
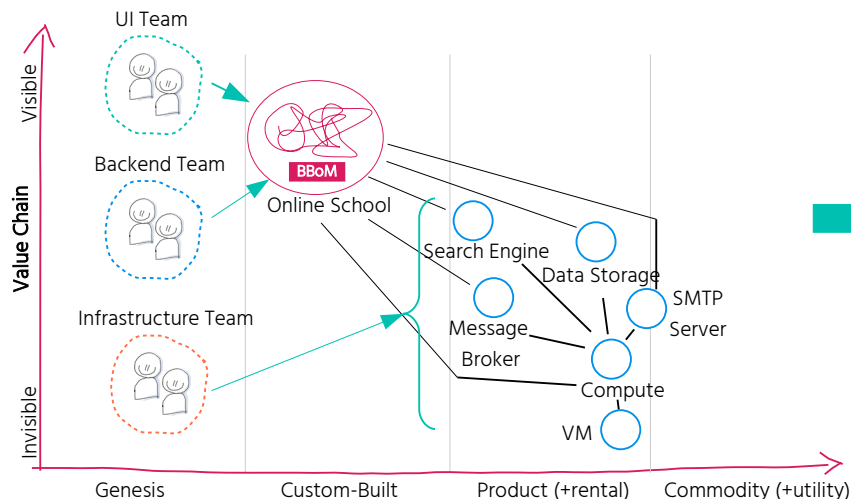
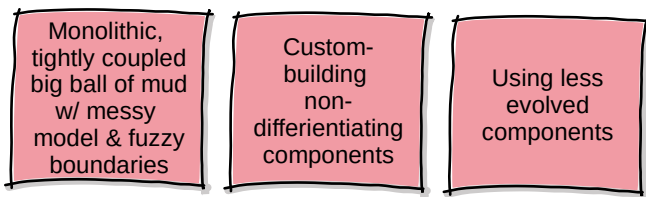
A Mix of Mindsets per Team



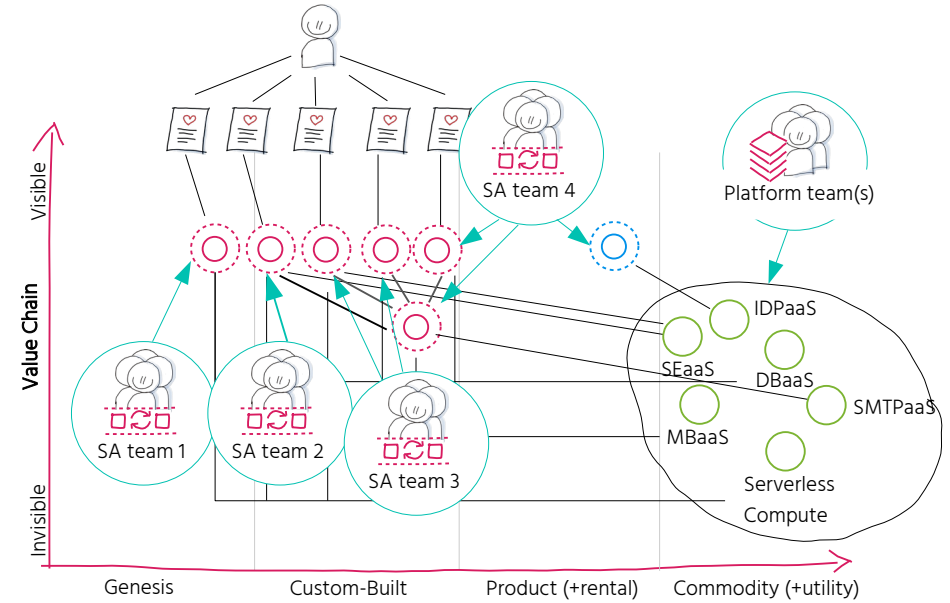
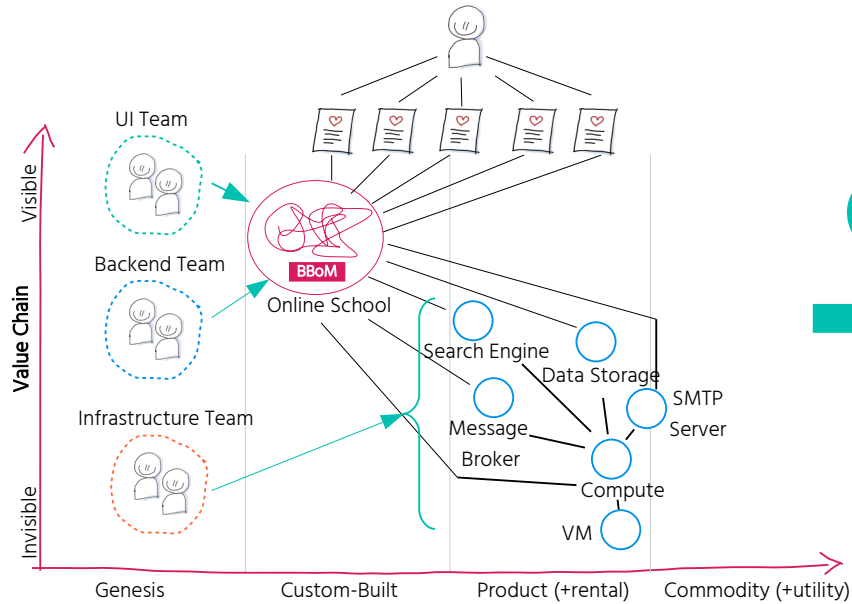
A Mix of Mindsets per Team



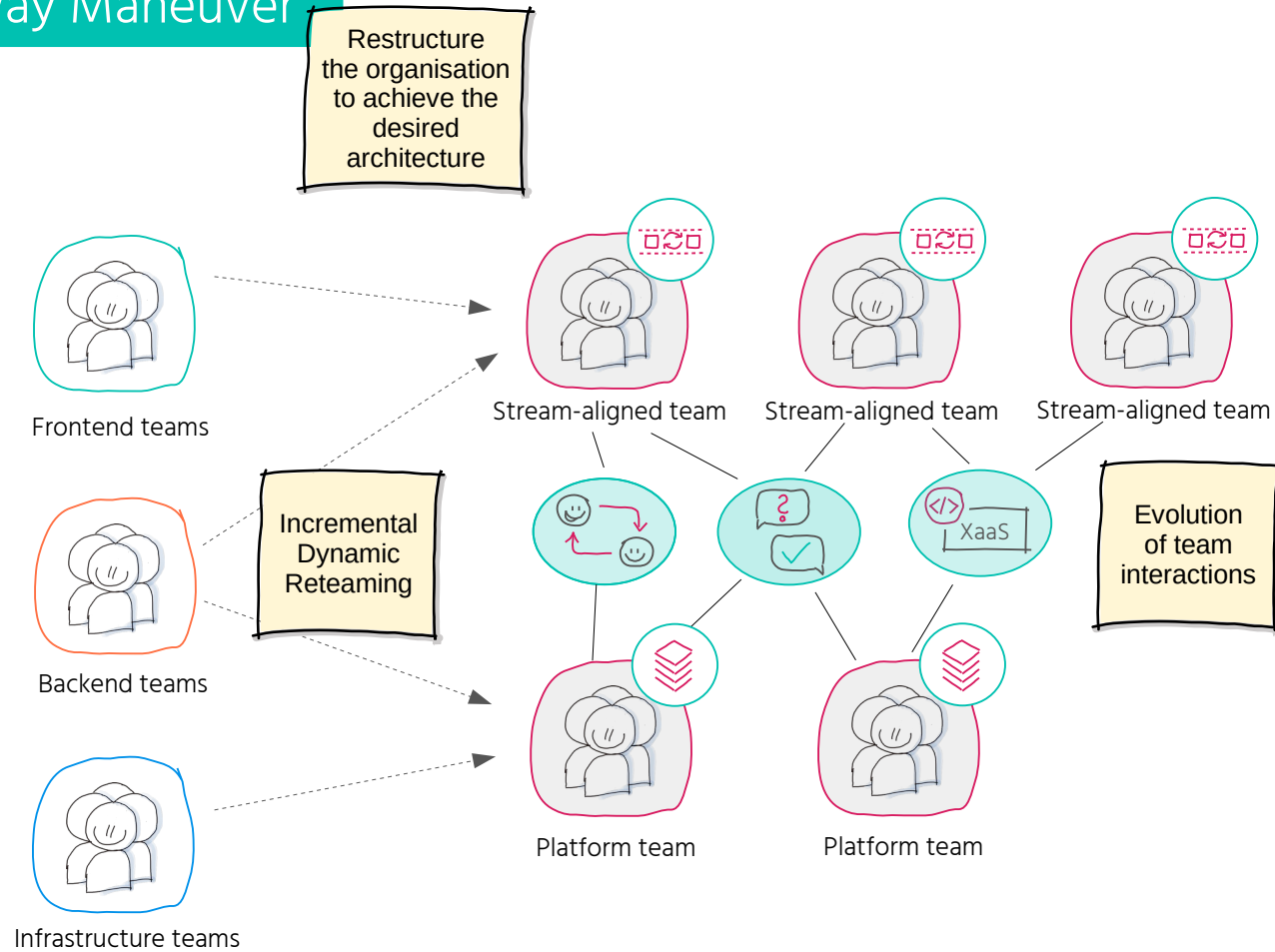
Unlocking Blockers to Flow



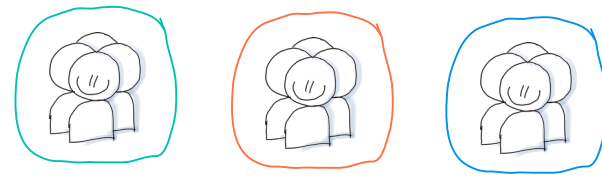
How to transition?



Reverse Conway Maneuver



Evolution of Team Topologies



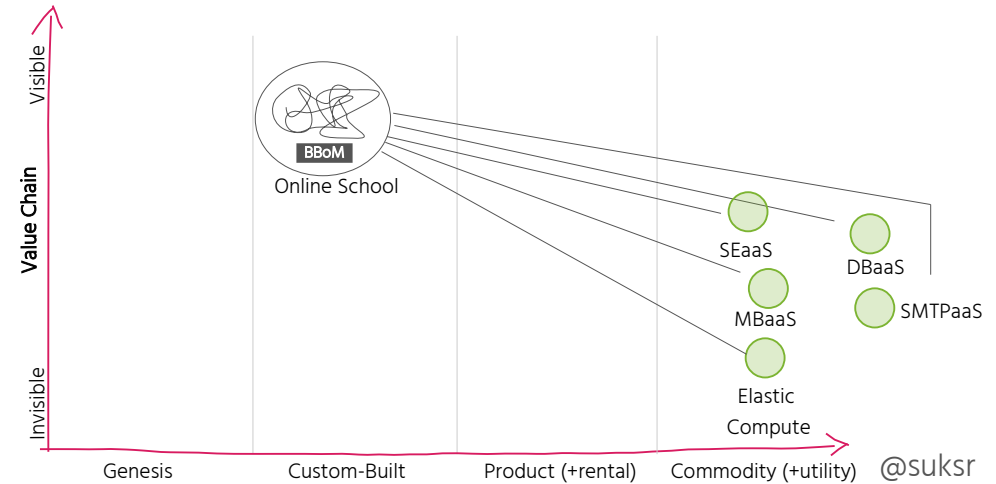
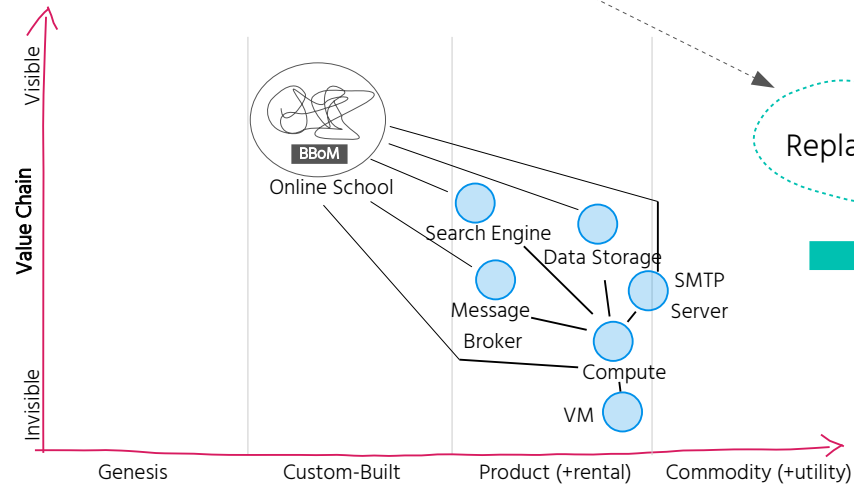
Frontend team

Backend team

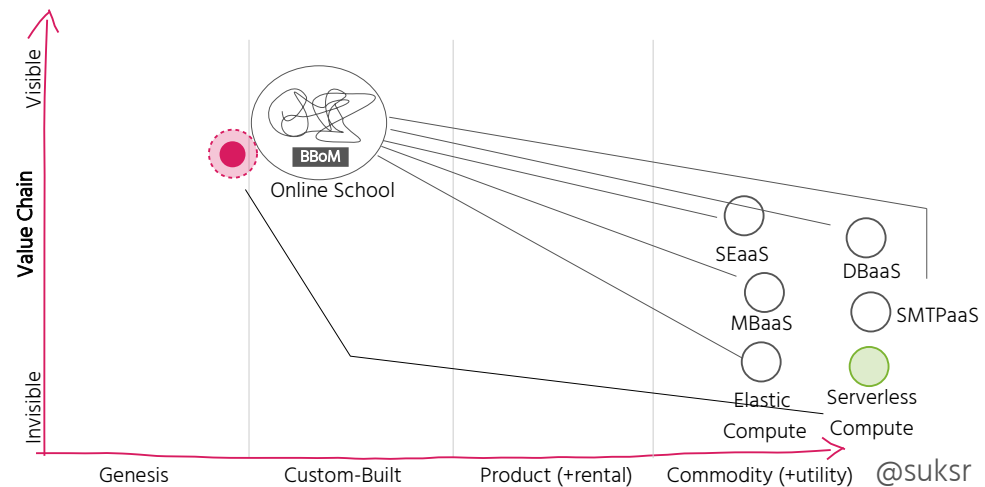
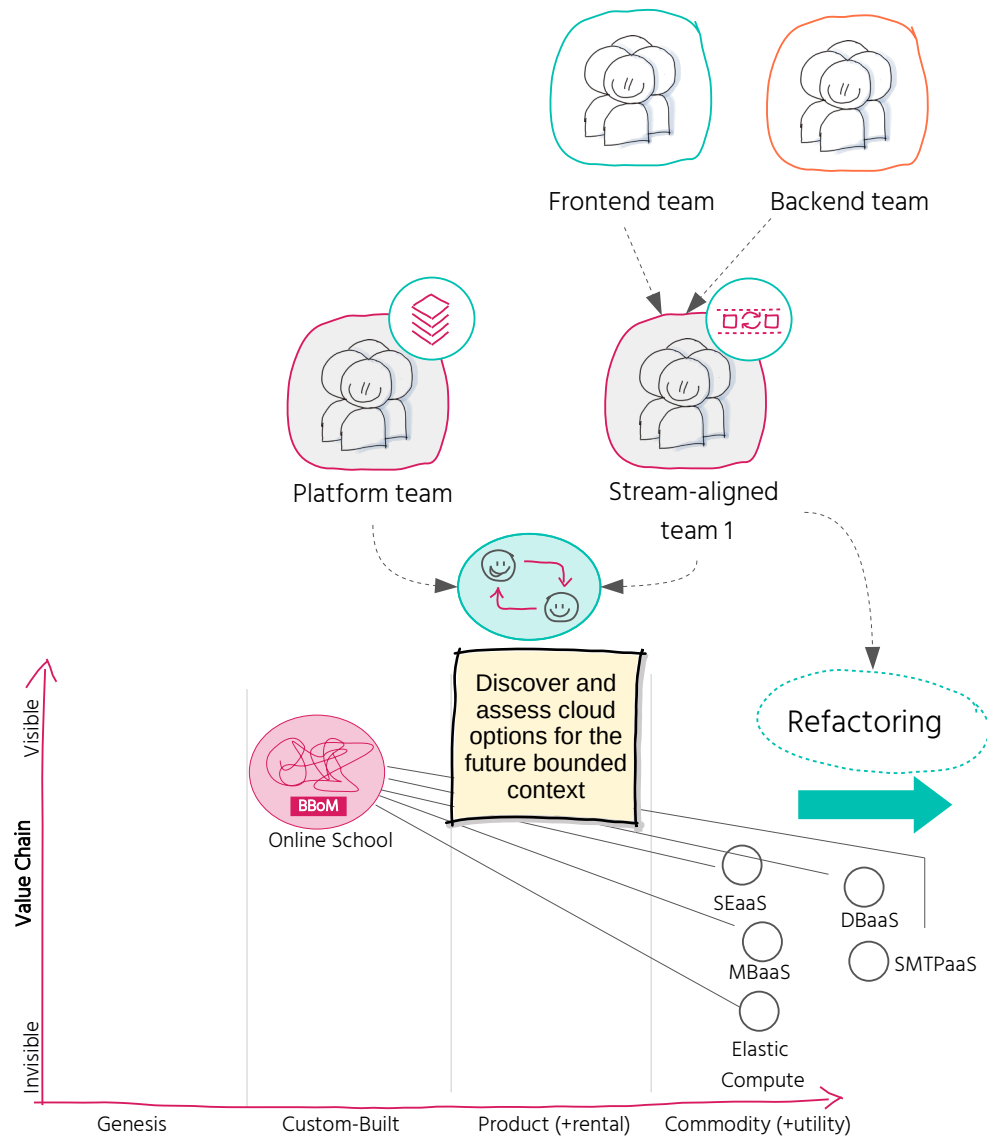
Infrastructure team



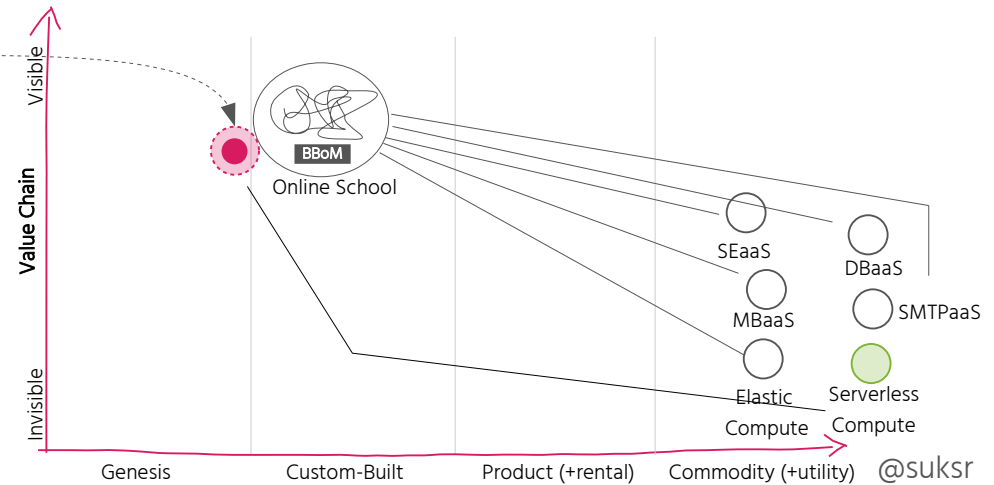
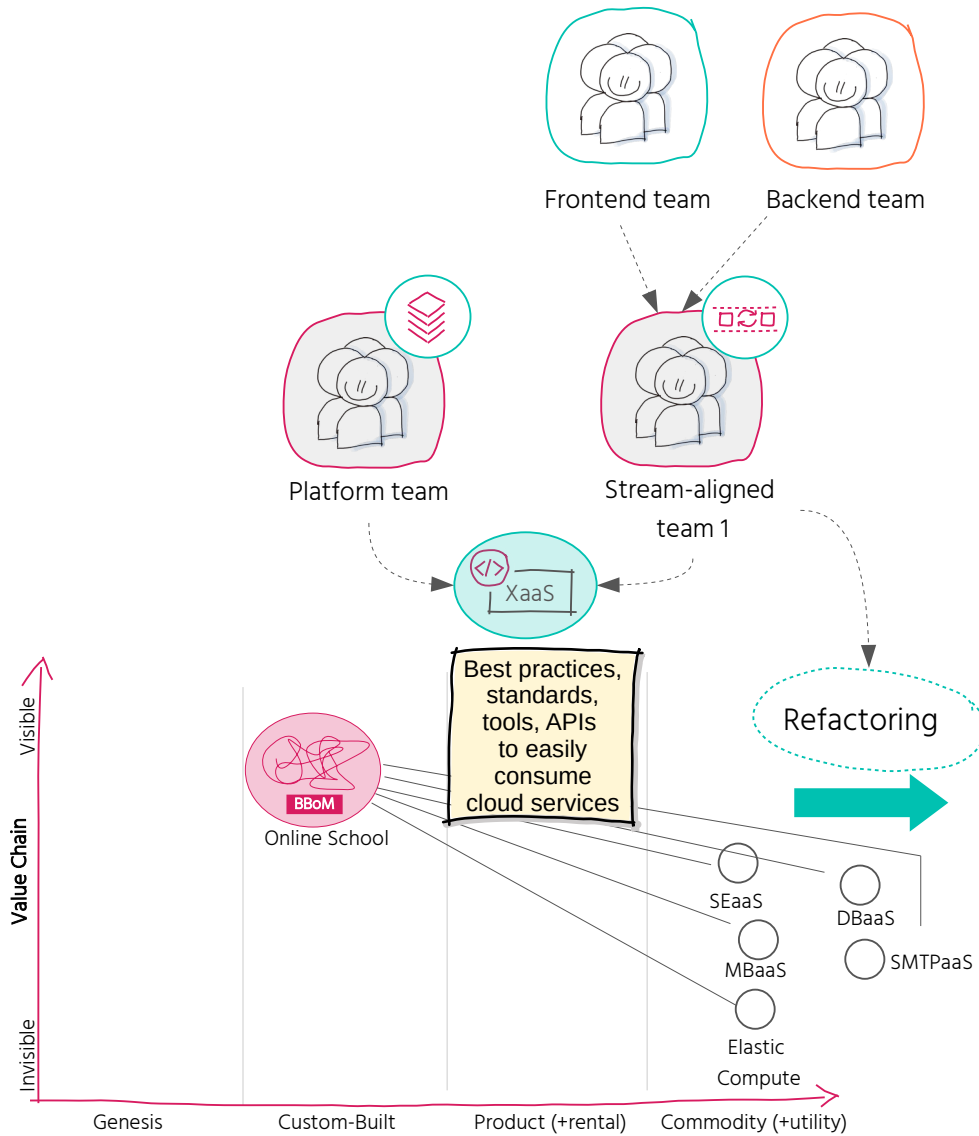
Platform team



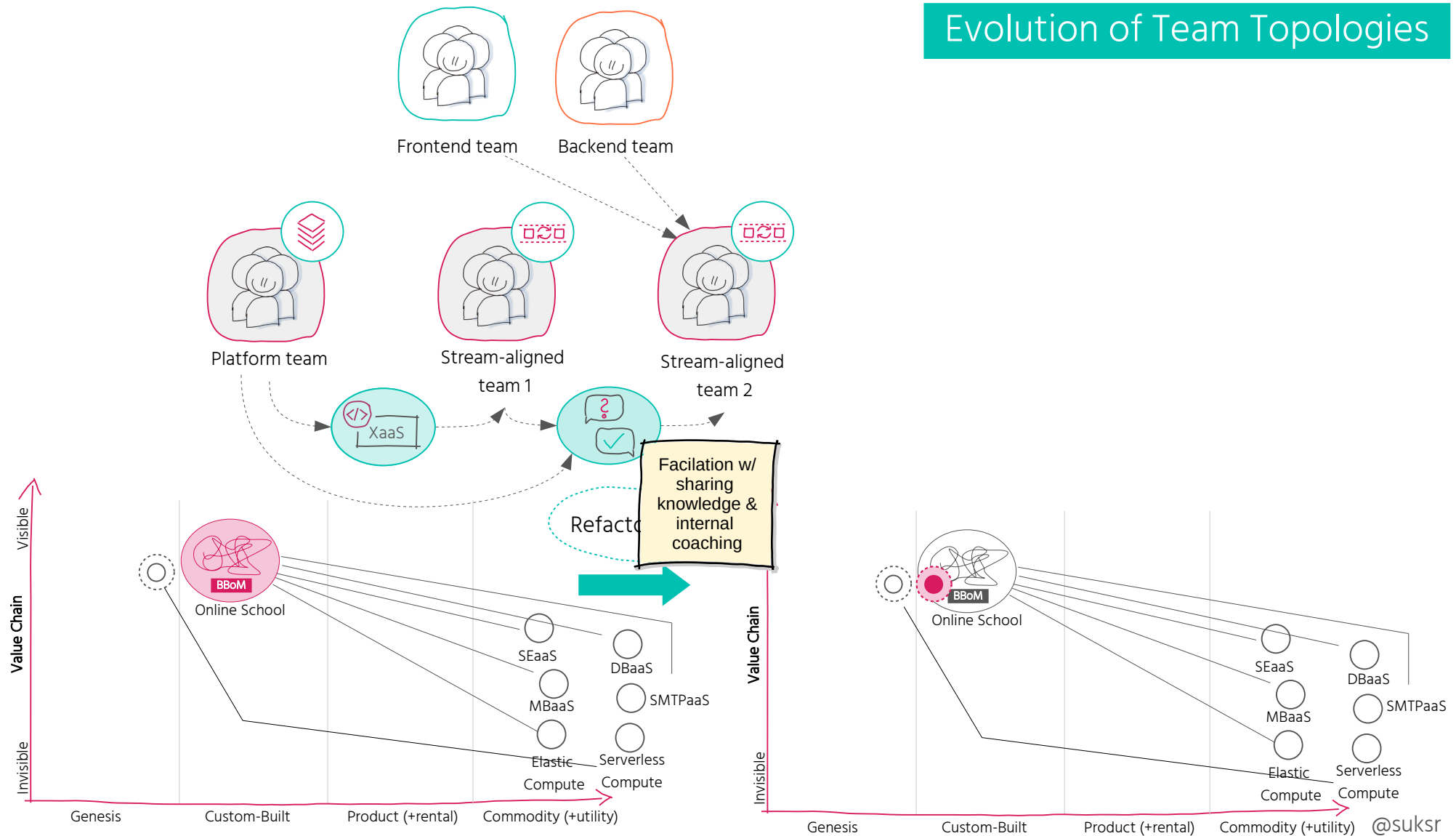
Evolution of Team Topologies



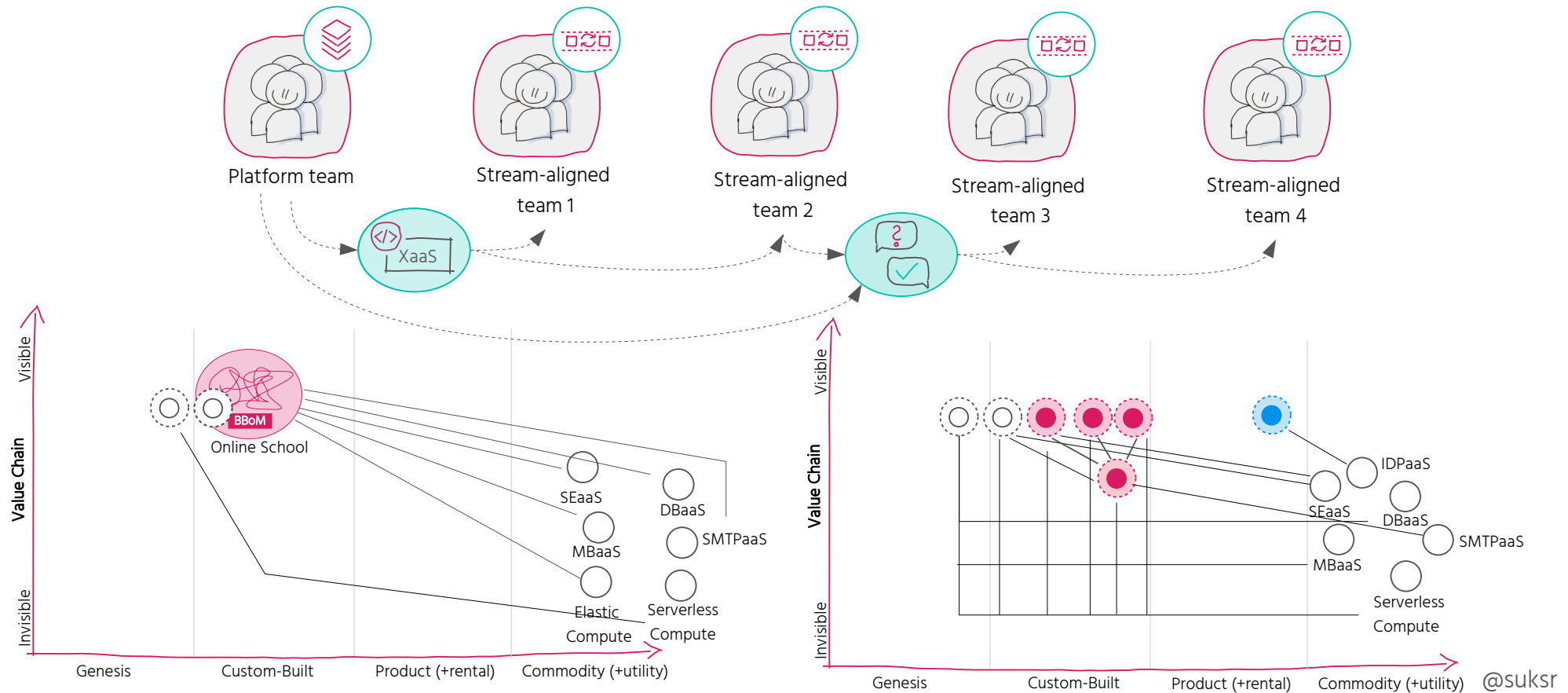
Evolution of Team Topologies



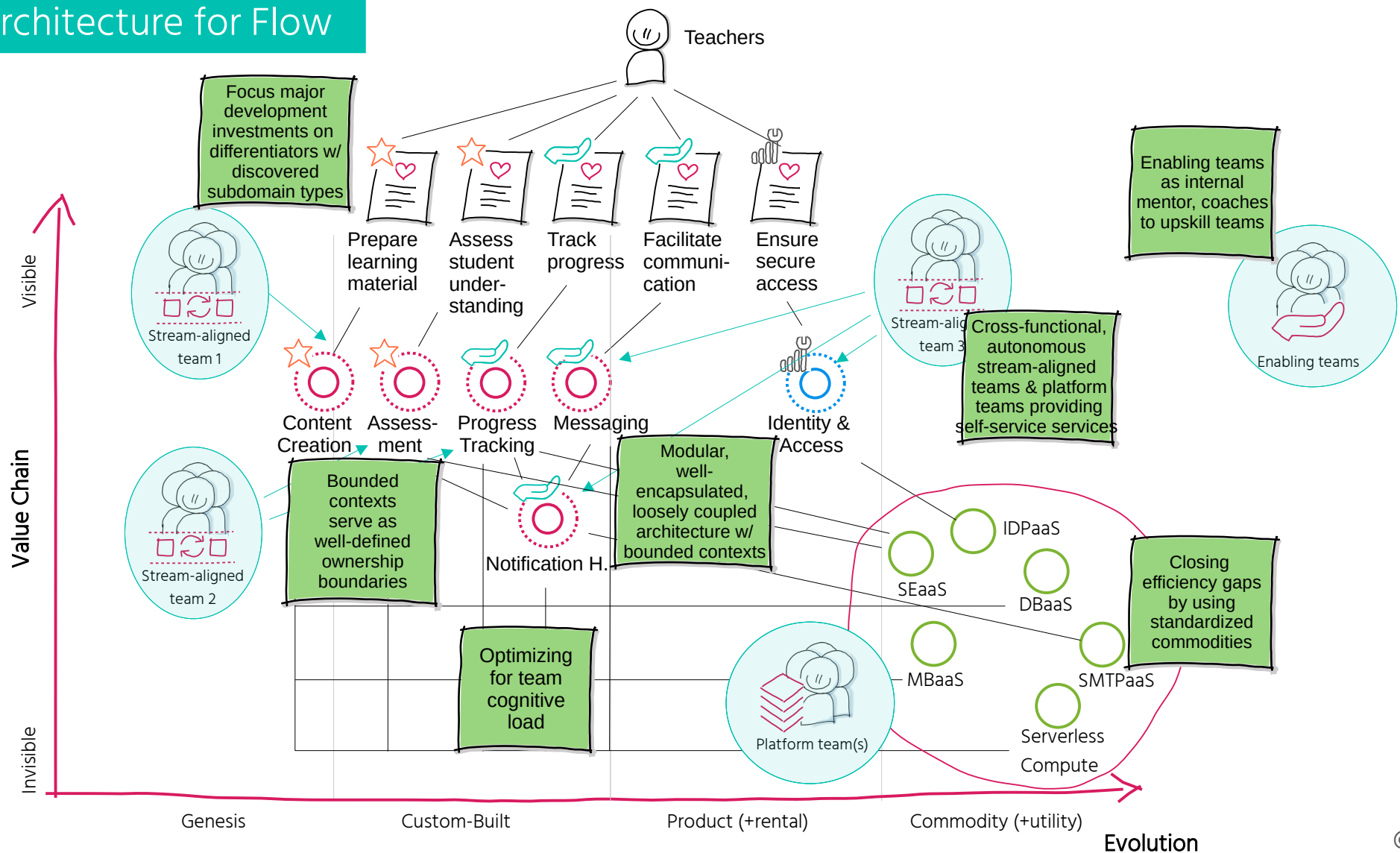
Evolution of Team Topologies



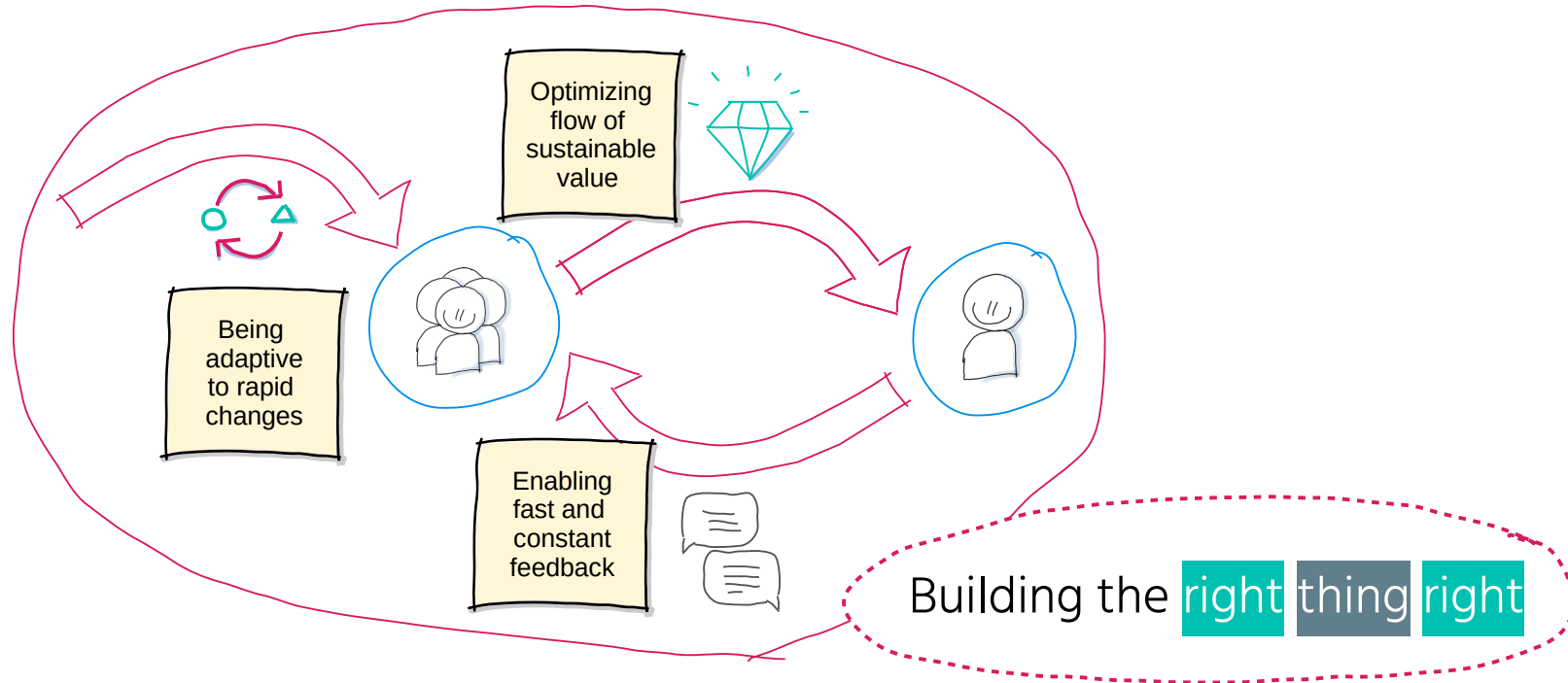
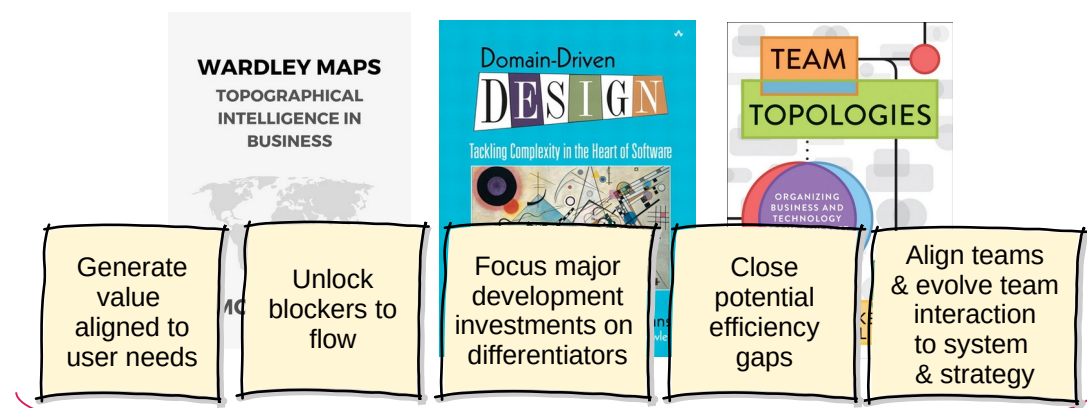
Evolution of Team Topologies



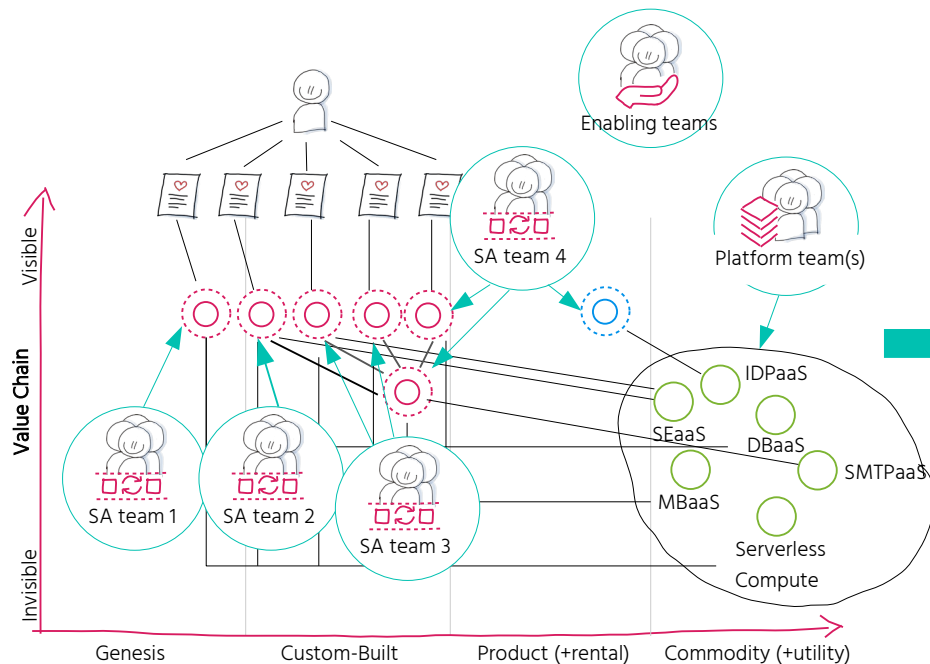
Architecture for Flow



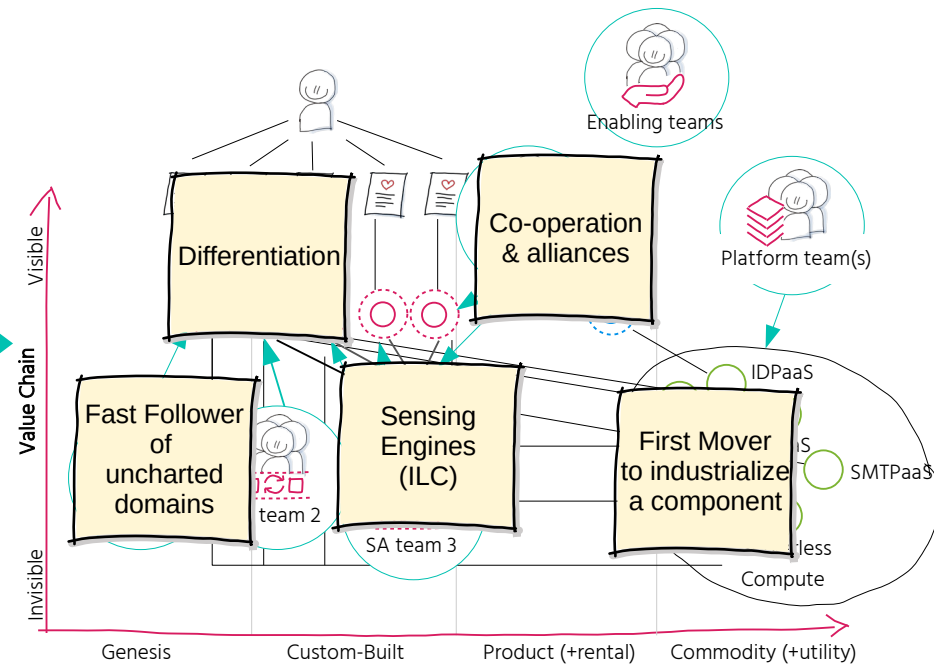
Summary



Looking Ahead

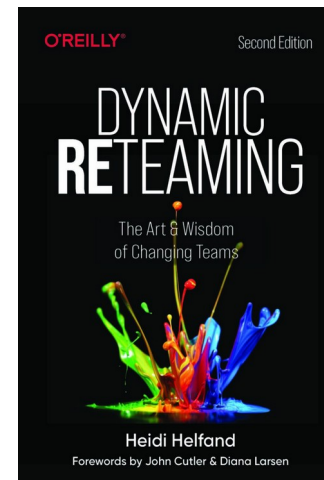
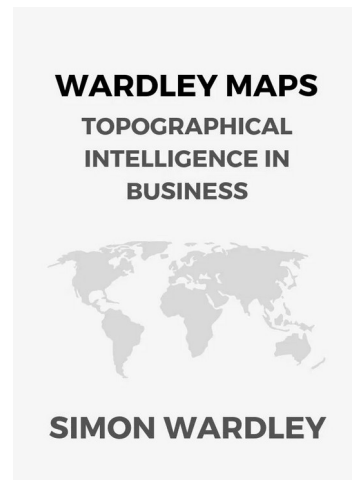
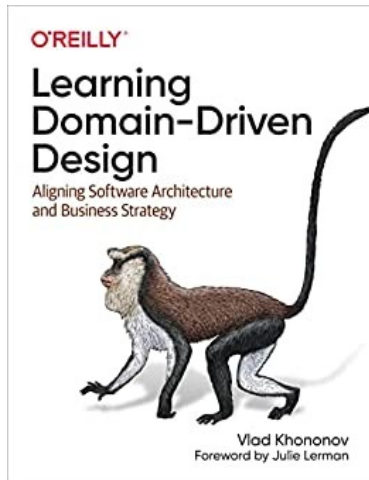
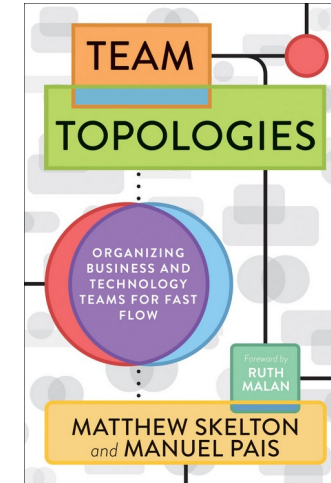
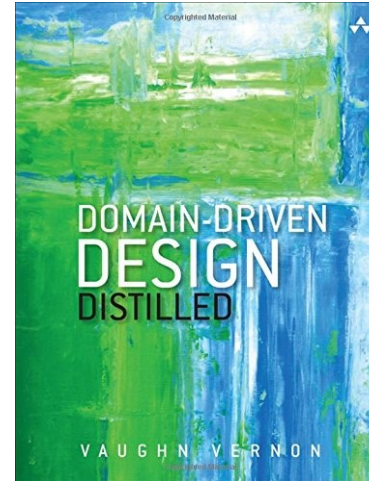
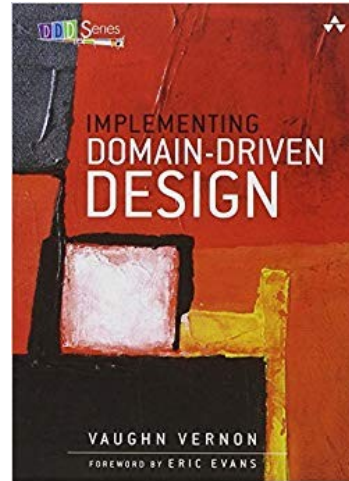
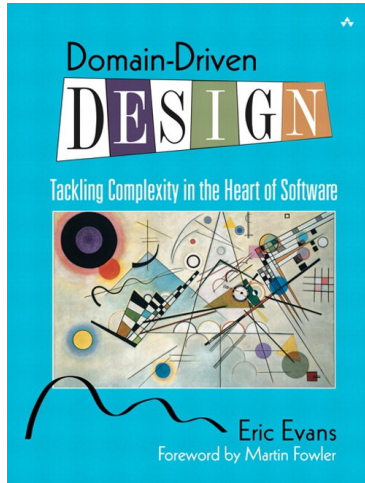


Responsive to change
introduced by others



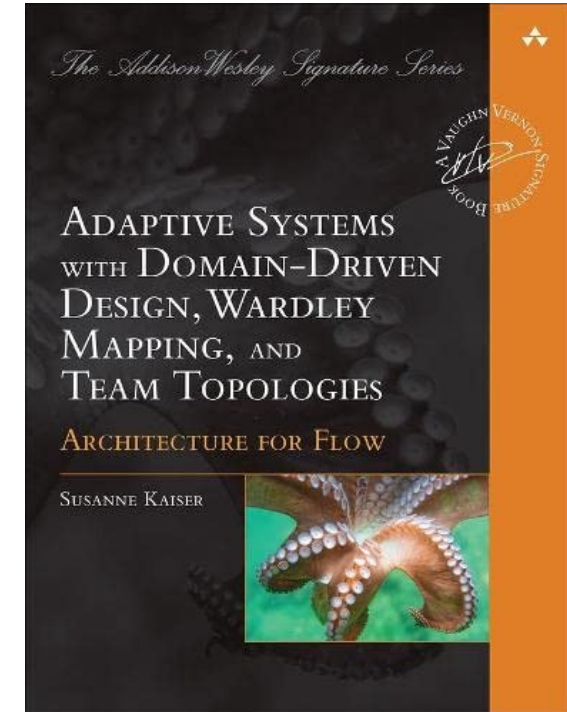
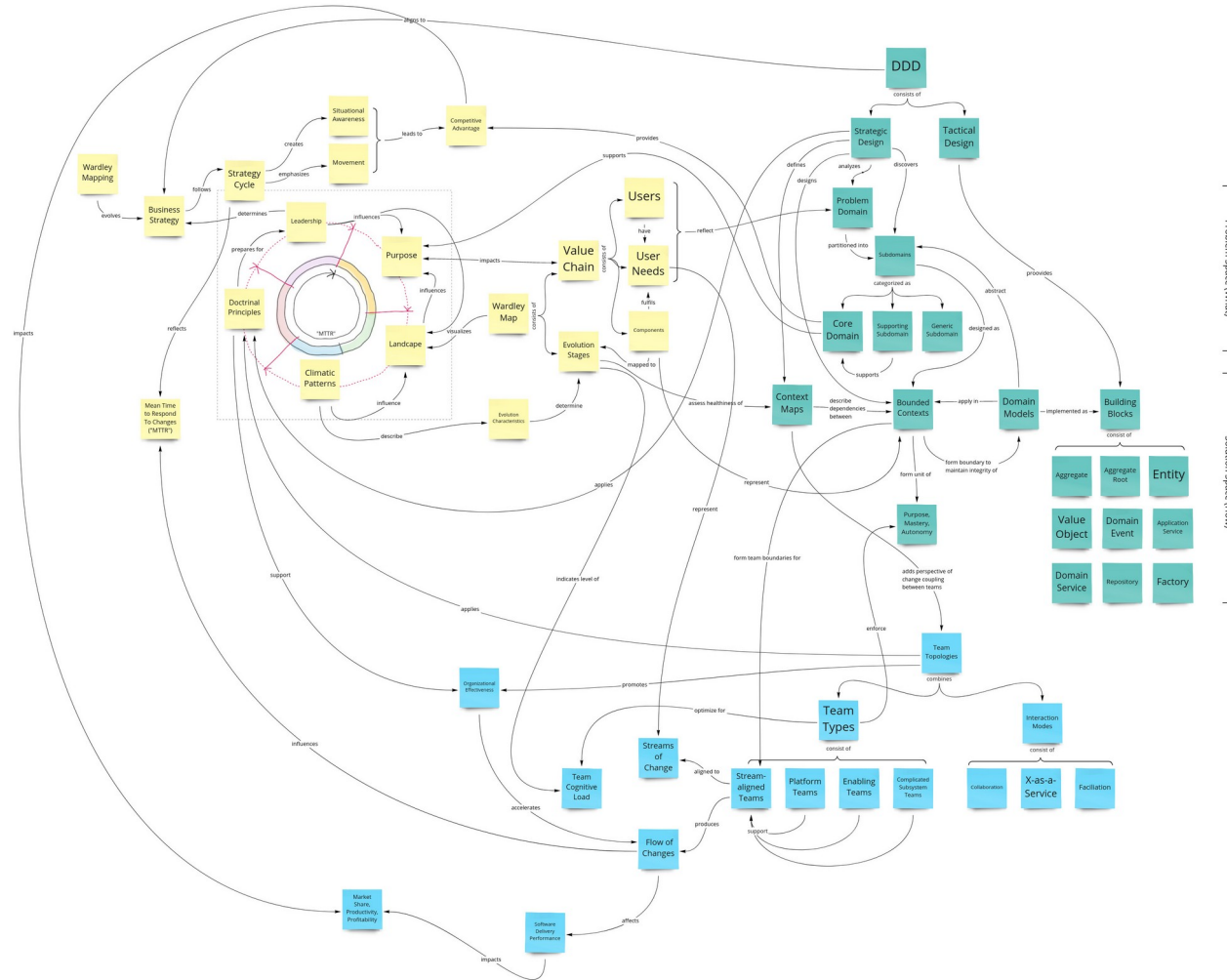
Leading future change
introduced by us

Some References



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If you are interested in more details ...



THANK YOU

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