

Adaptive Socio-Technical Systems w/ Architecture for Flow

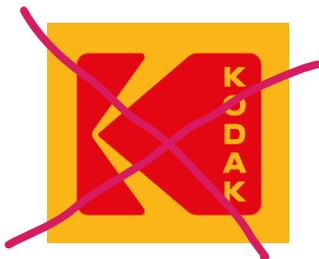
Susanne Kaiser
Independent Tech Consultant
@suksr

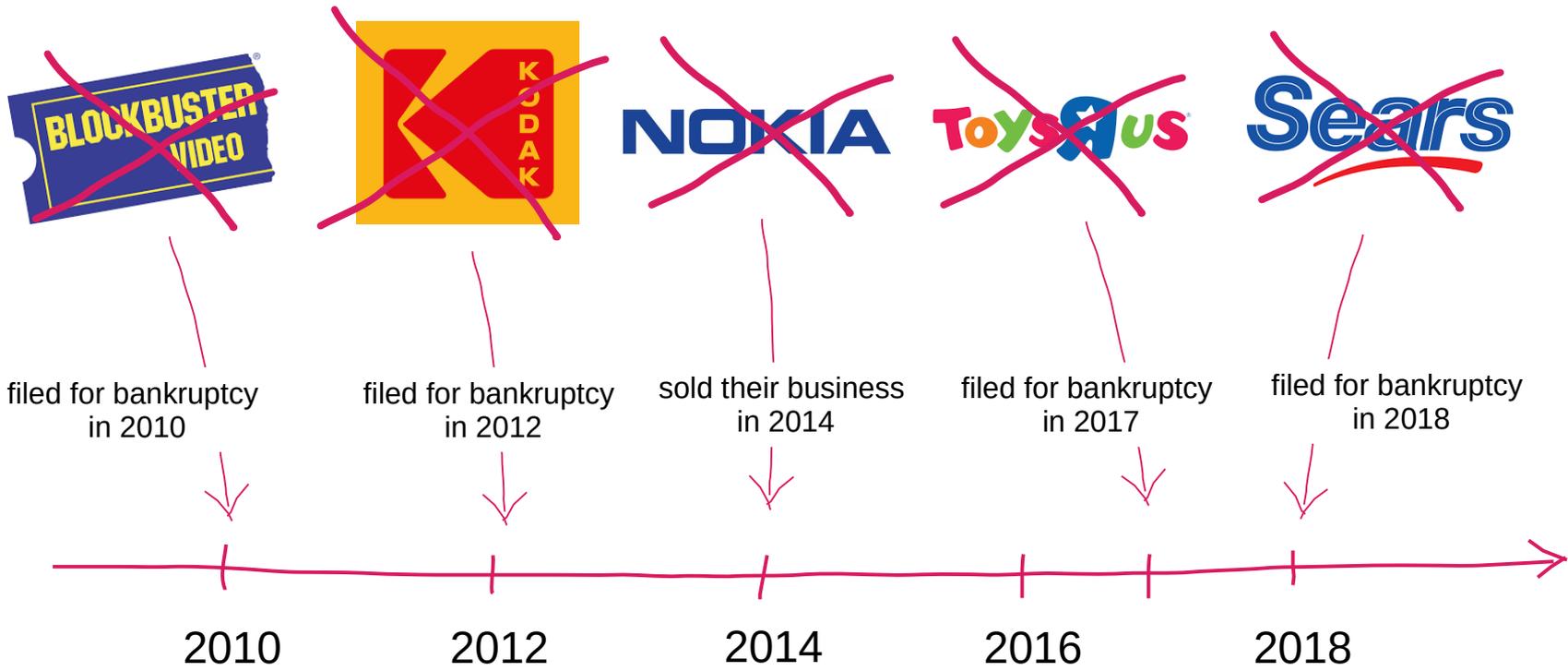
What do these companies have in common ?

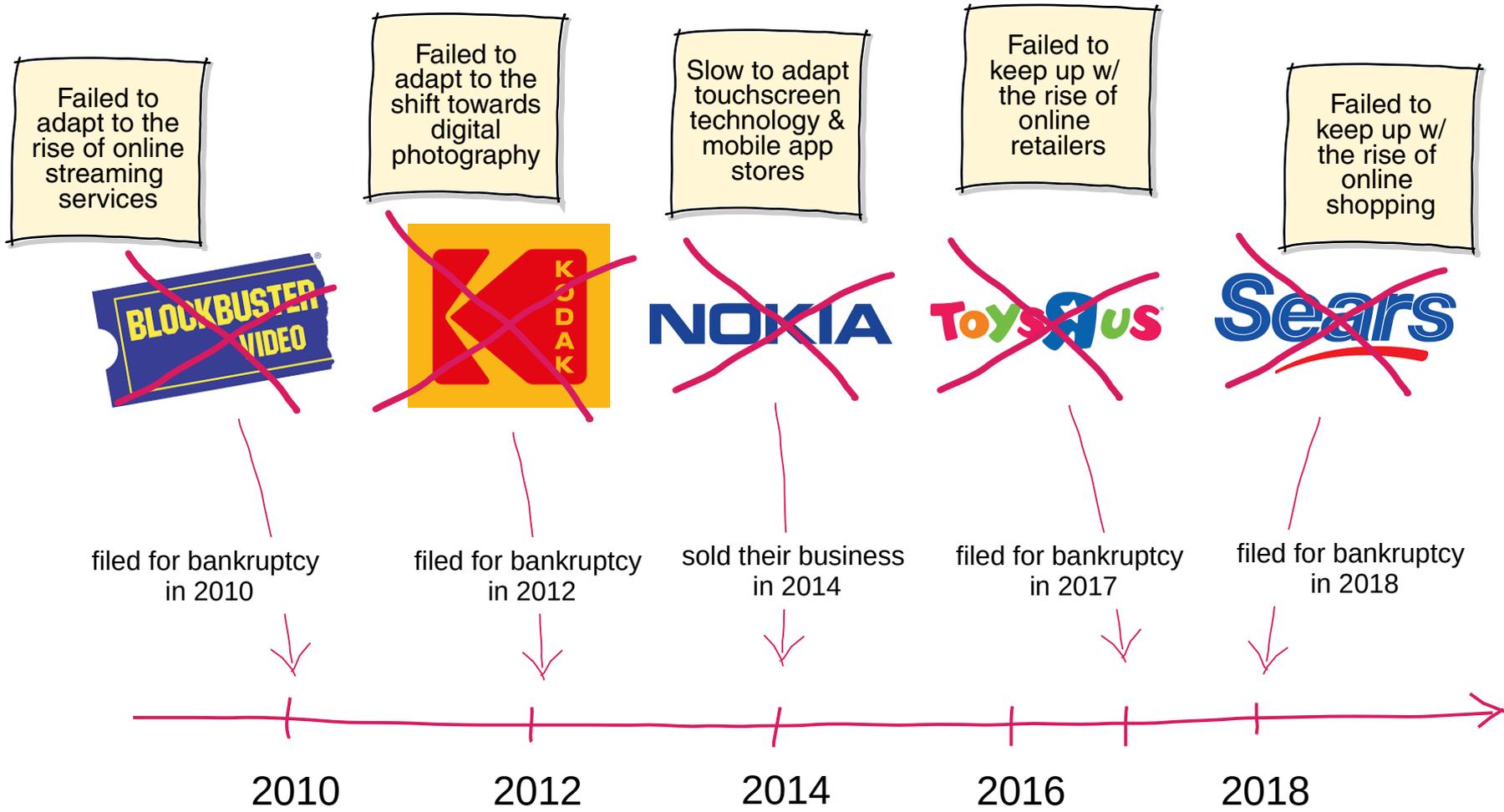


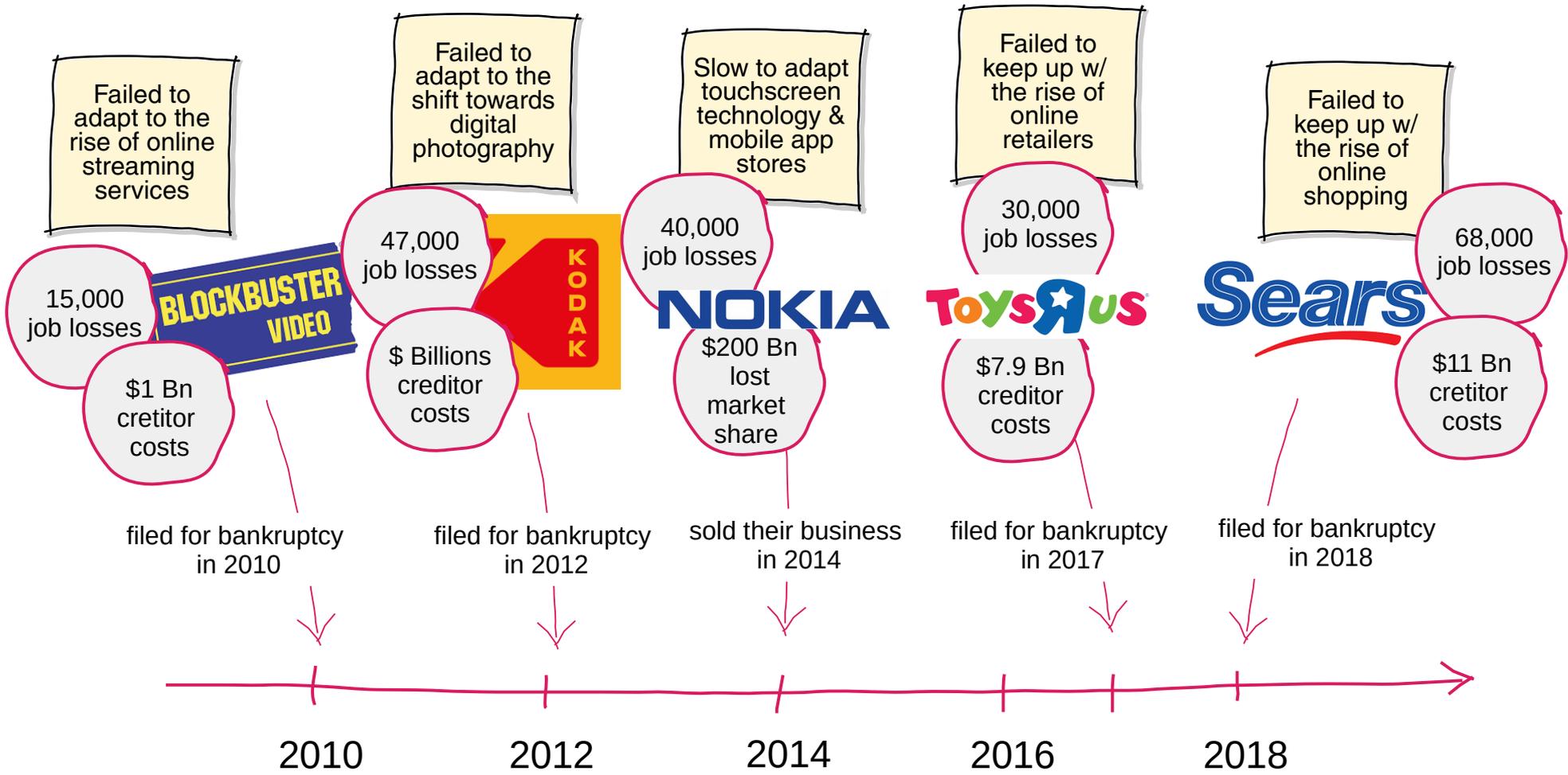
NOKIA











Failure to Adapt to Changing Circumstances

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graph TD; A[Failure to Adapt to Changing Circumstances] --> B[~200,000 job losses]; A --> C[~$220 Bn of costs for creditors incl. lost revenue, market share];
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~200,000
job losses

~\$220 Bn
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Organizations have to
continuously adapt
and evolve to
remain competitive

How to design
systems that can
evolve and thrive in
the face of
constant change?

How to design systems that can evolve and thrive in the face of constant change?

Understanding the business landscape and external forces to design effective strategies

Knowing the business domain & closely align system to business needs

Aligning teams and evolving their interactions to the system & strategy

How to design systems that can evolve and thrive in the face of constant change?

Understanding the business landscape and external forces to design effective strategies

Wardley Mapping

Knowing the business domain & closely align system to business needs

Domain-Driven Design

Aligning teams and evolving their interactions to the system & strategy

Team Topologies

Example: Online School

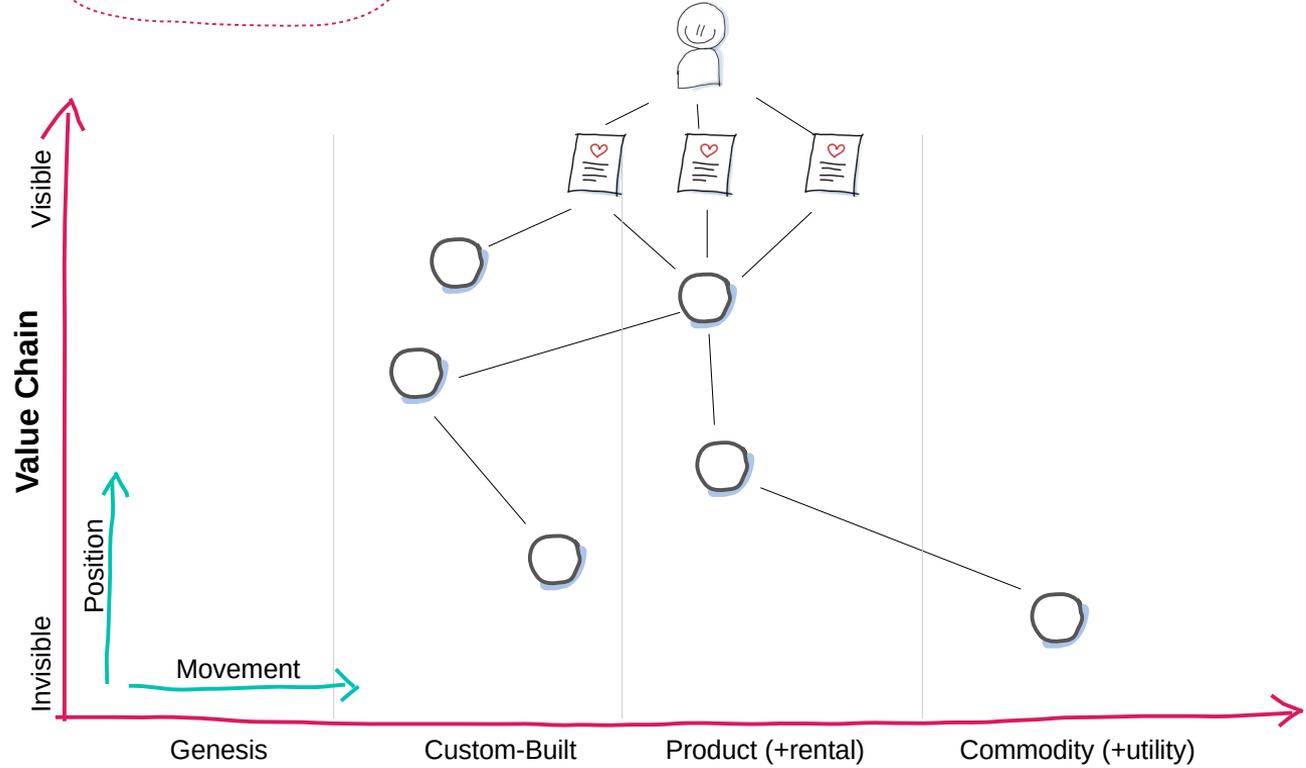
Online
School



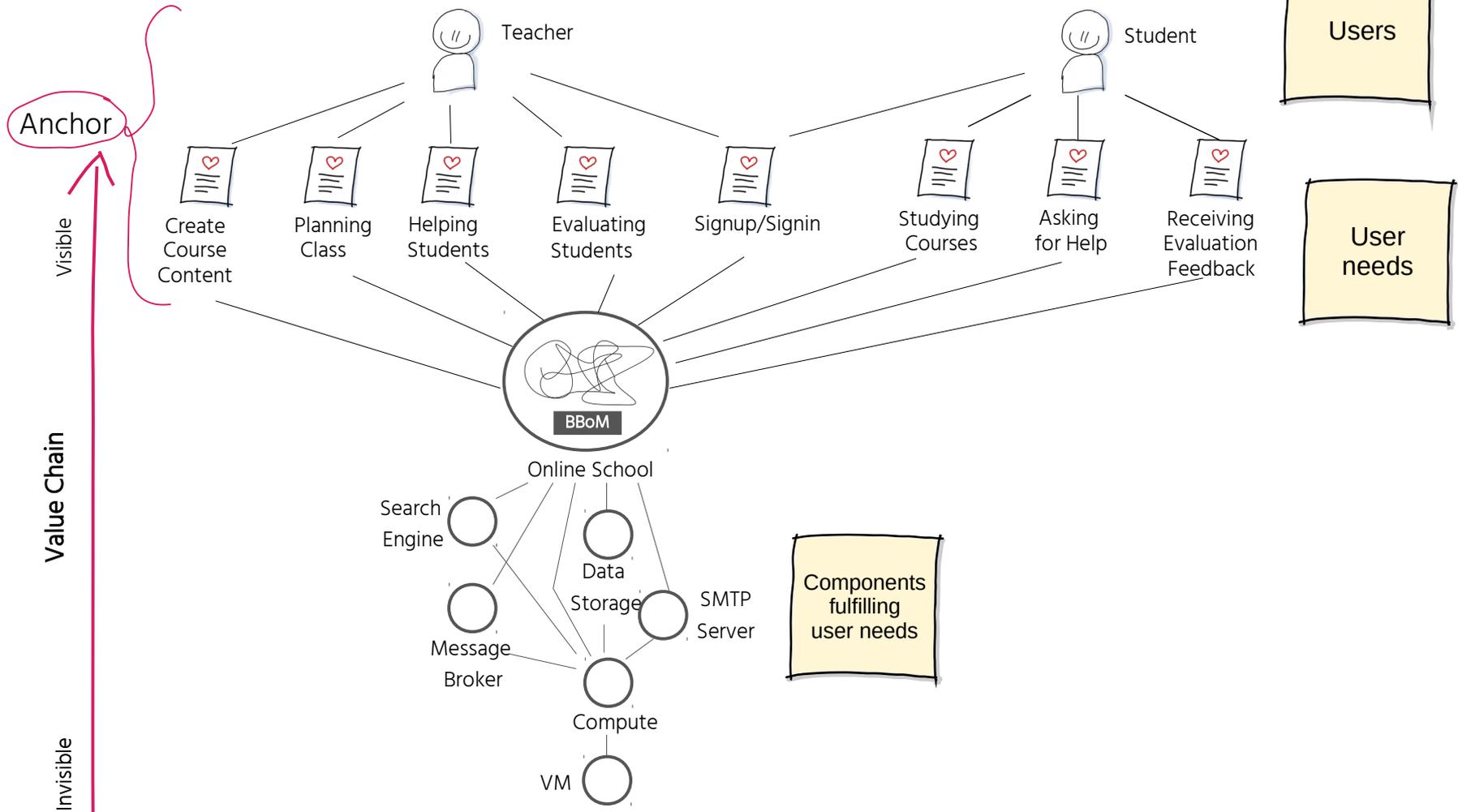
Image source: <https://www.food-management.com>

Understanding the business landscape

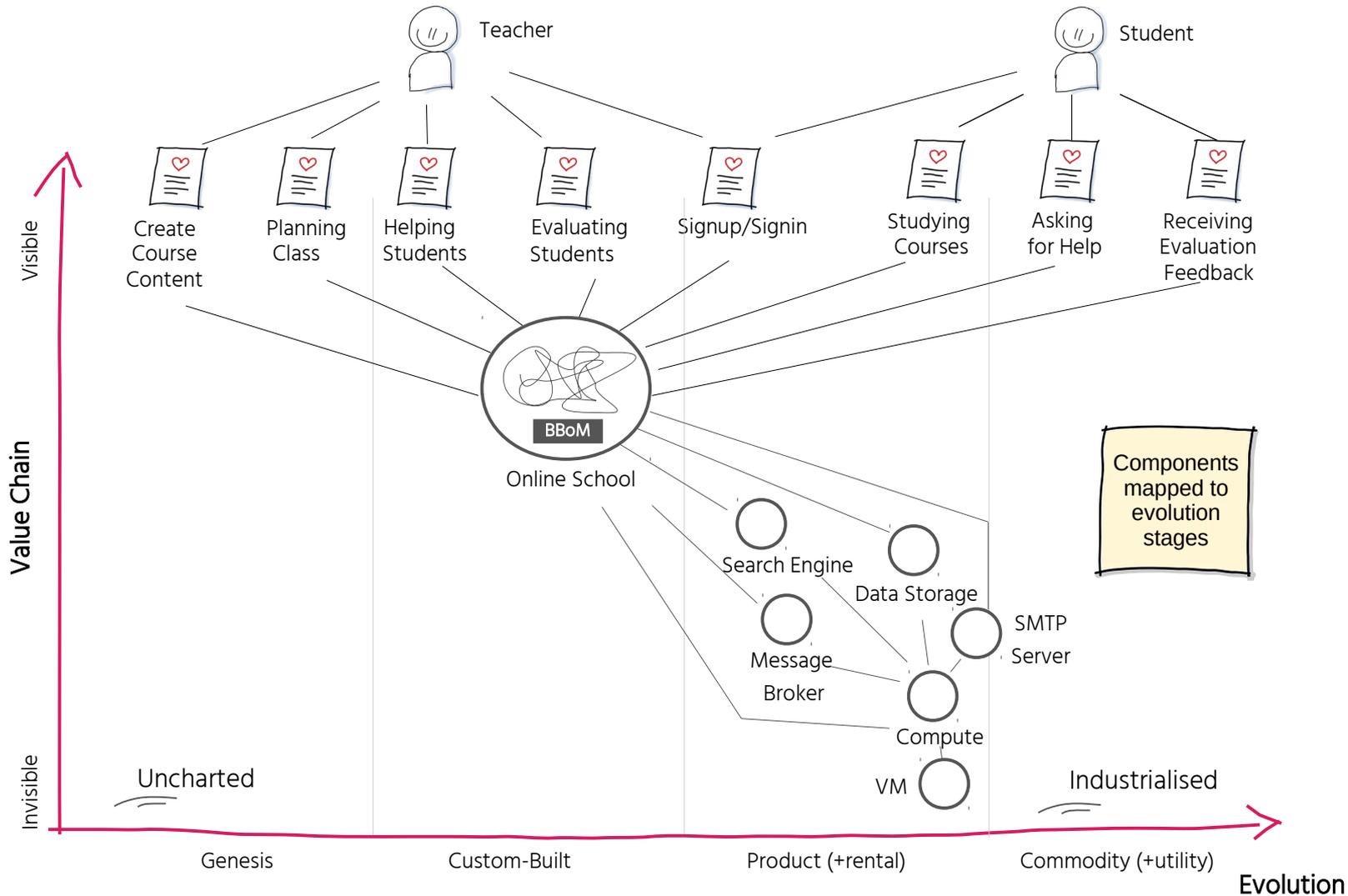
Wardley Map



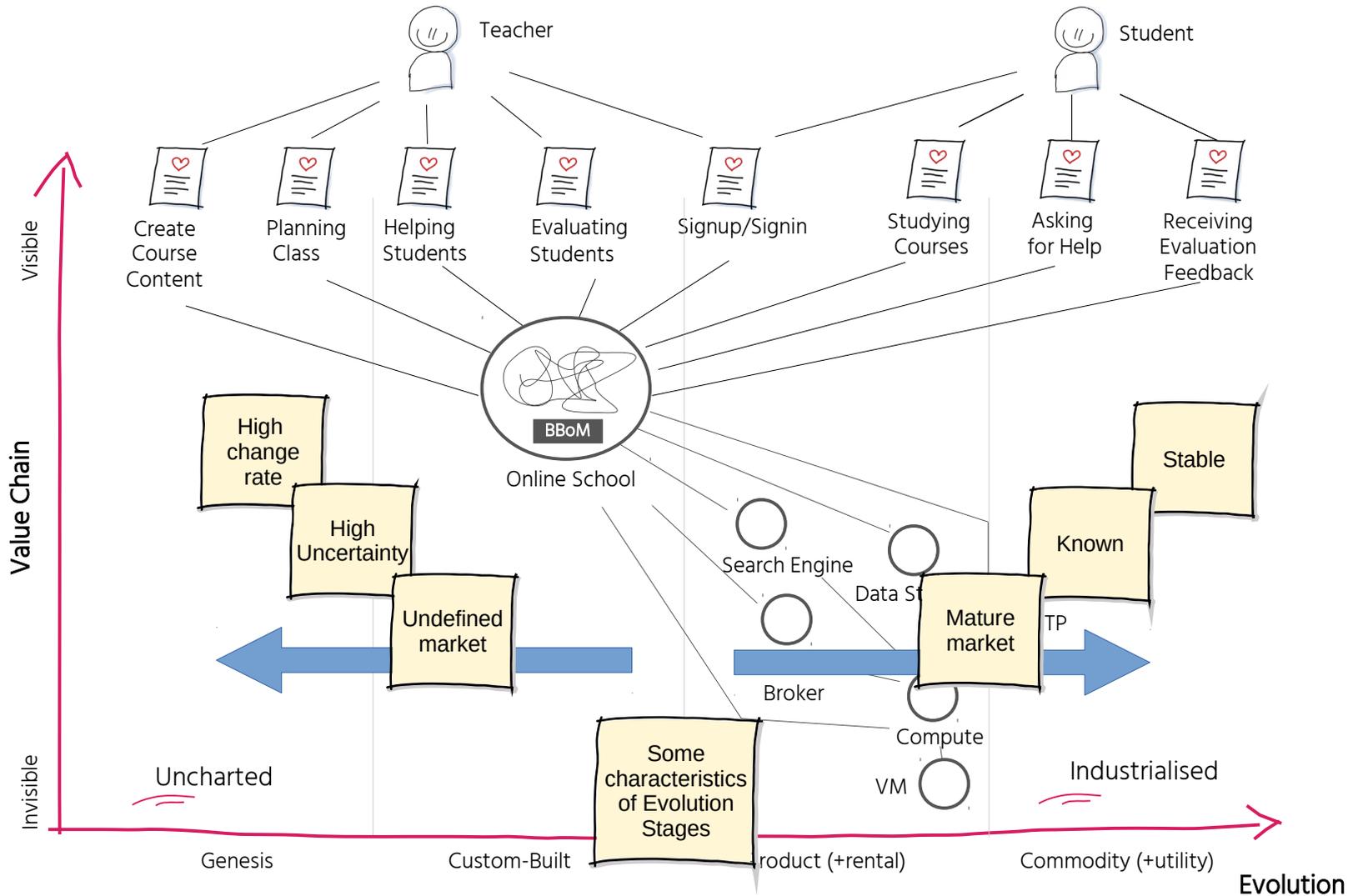
The Landscape of the Current State



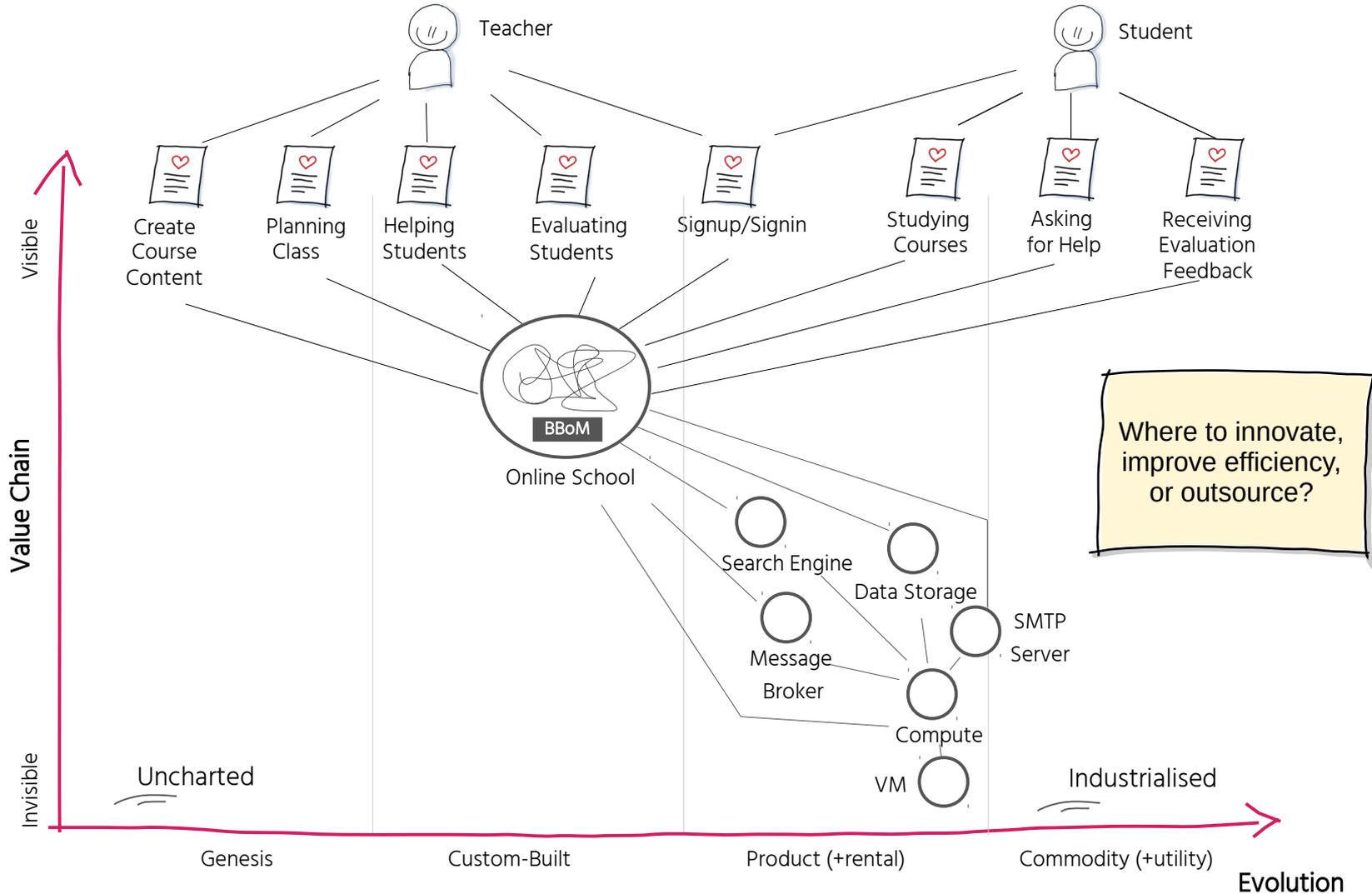
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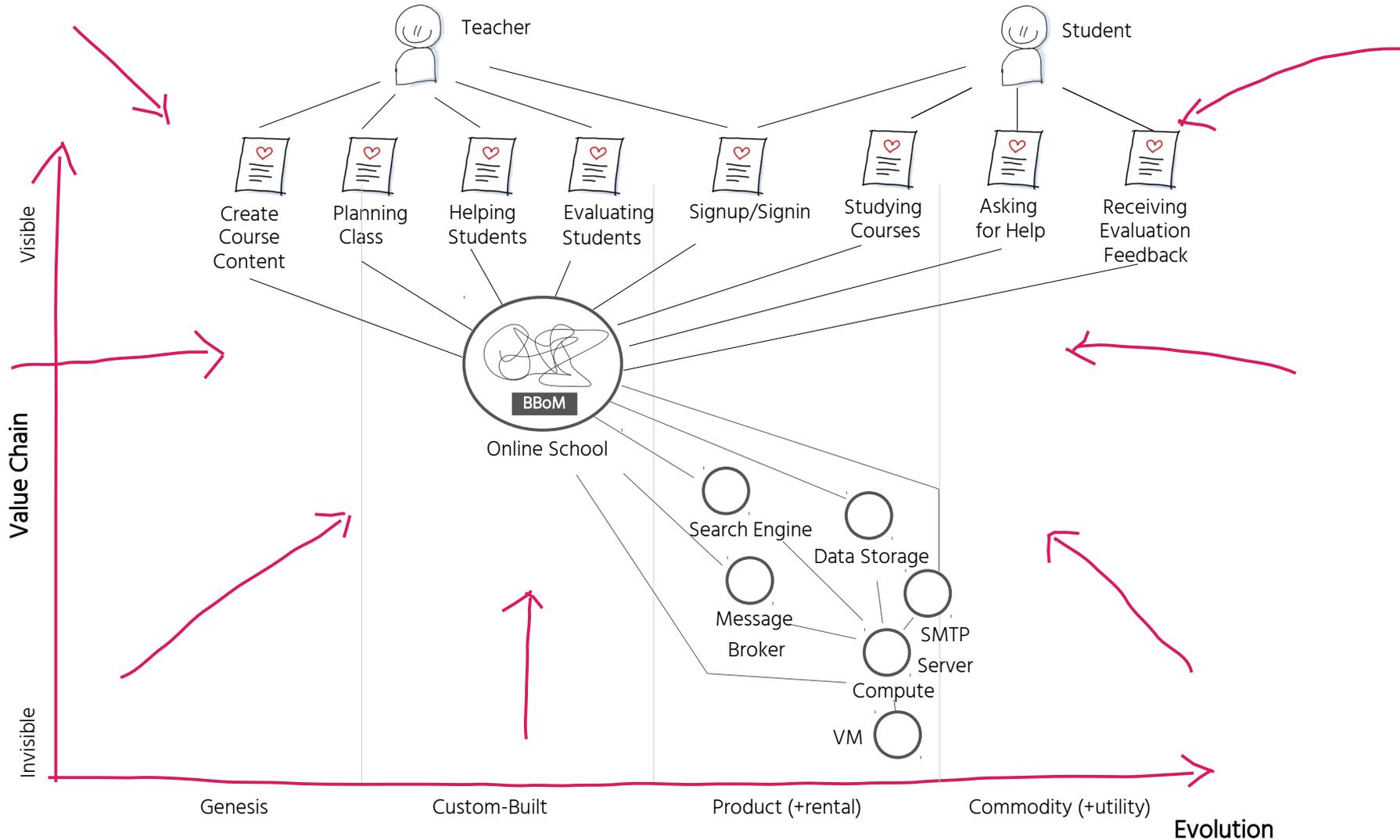
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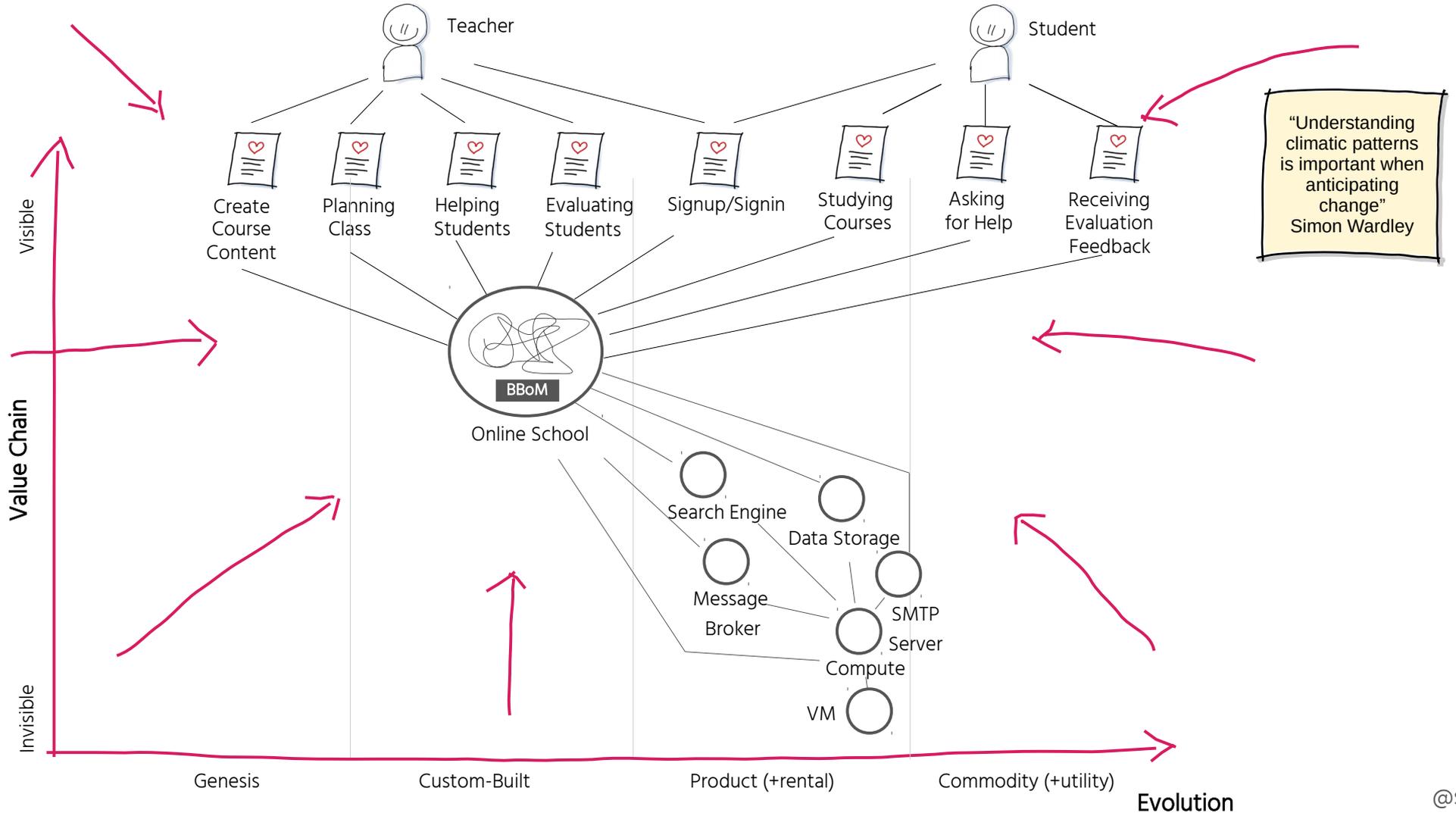
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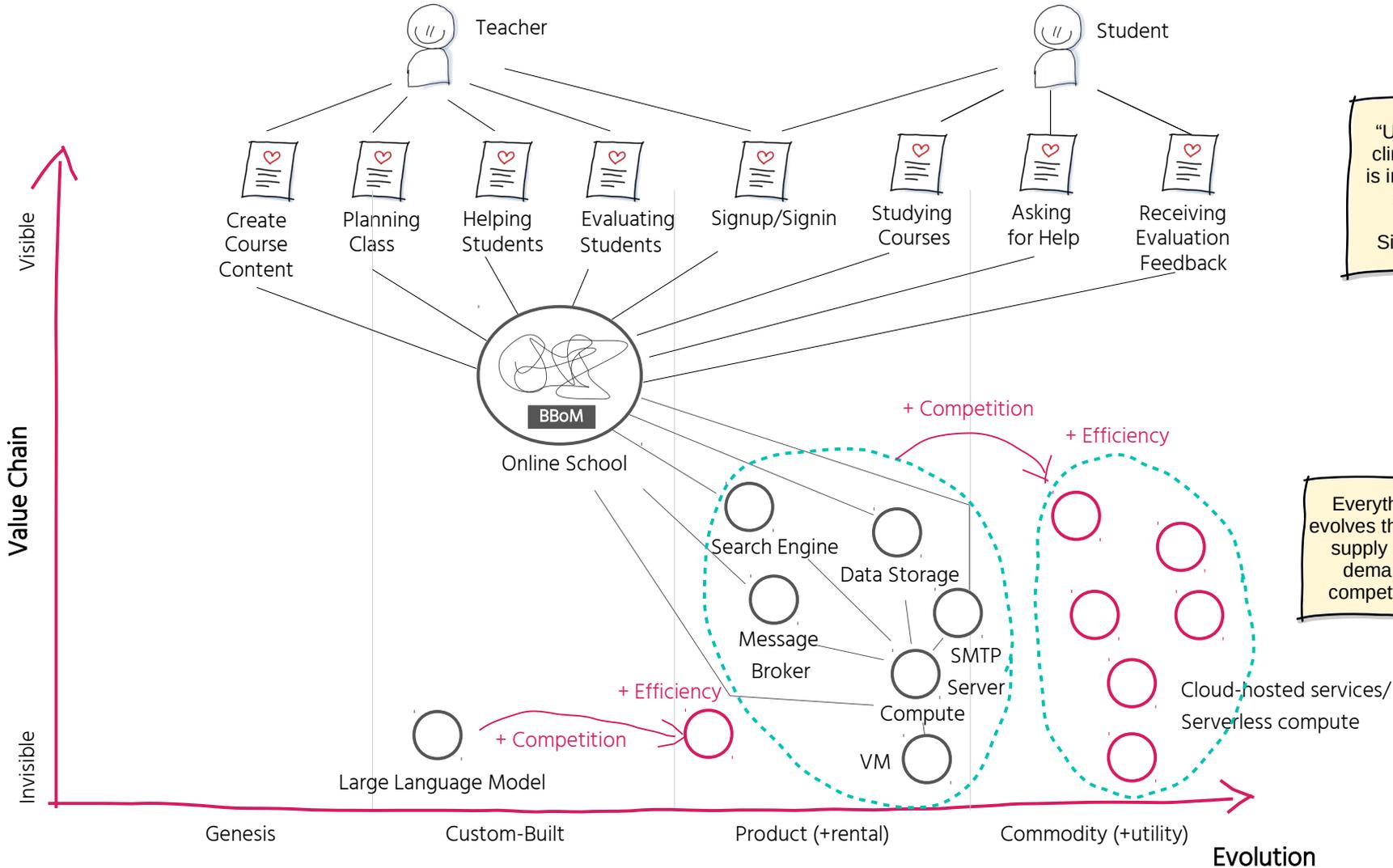
External Forces Impacting the Landscape: Climatic Patterns



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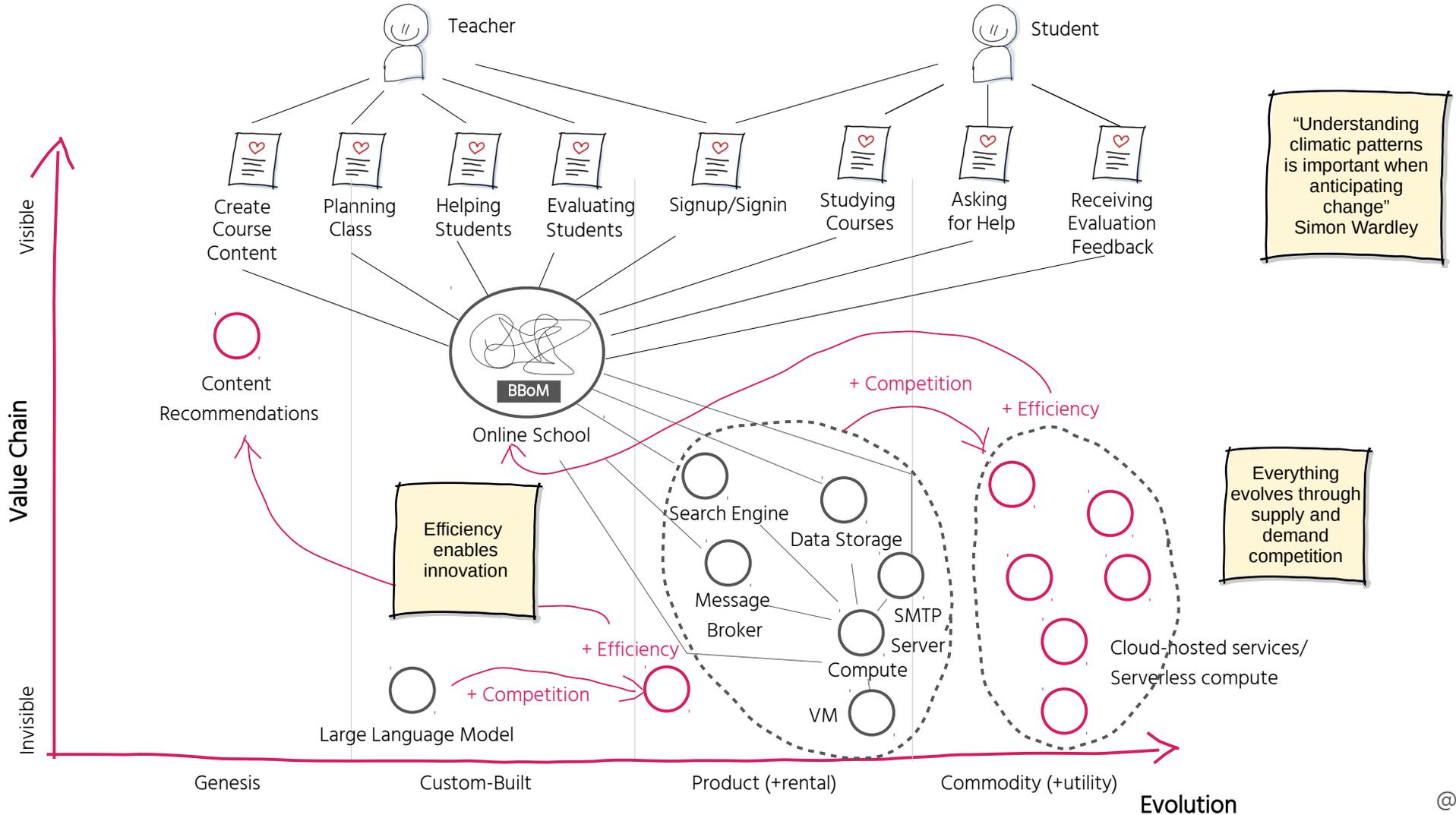
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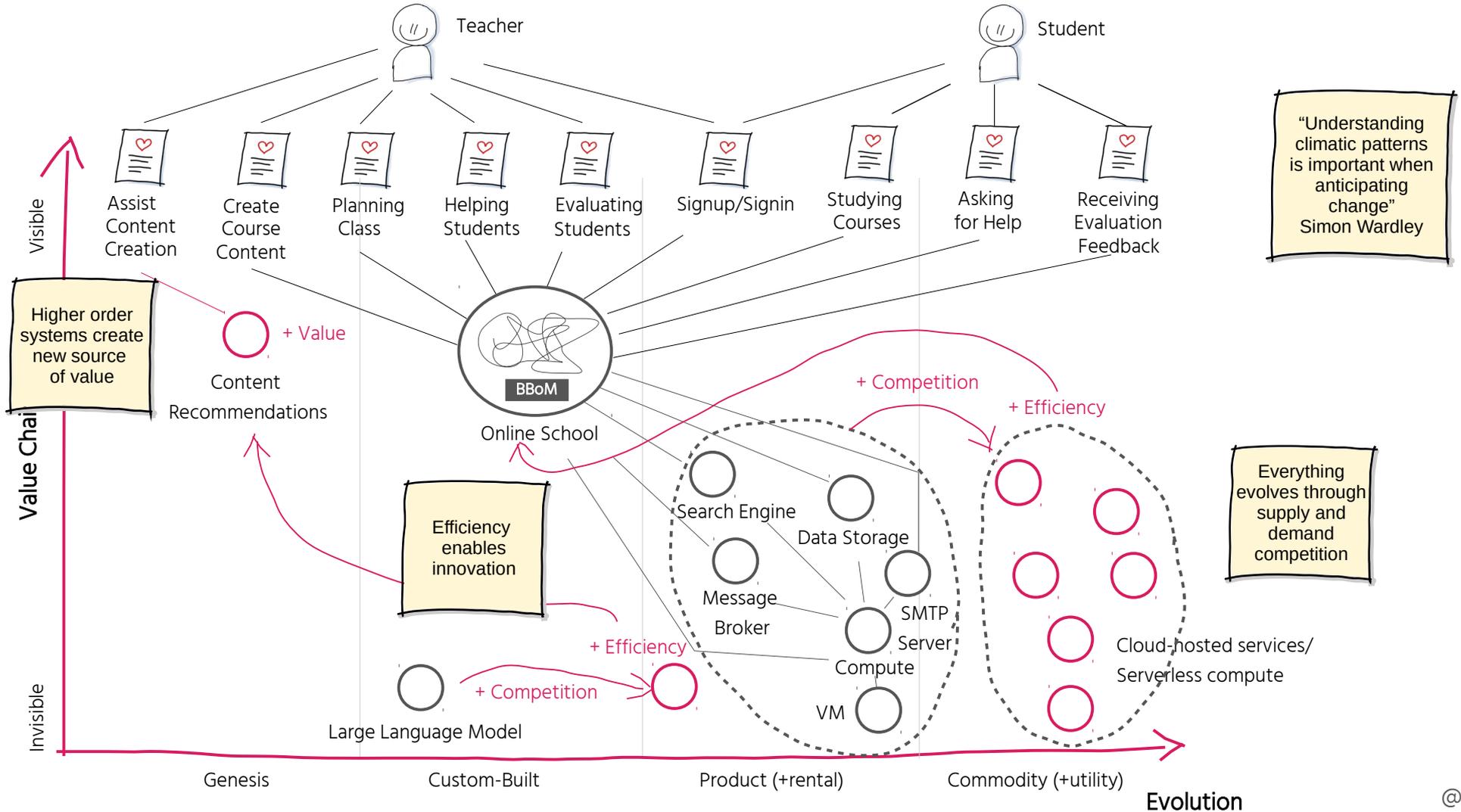
“Understanding climatic patterns is important when anticipating change”
Simon Wardley

Everything evolves through supply and demand competition

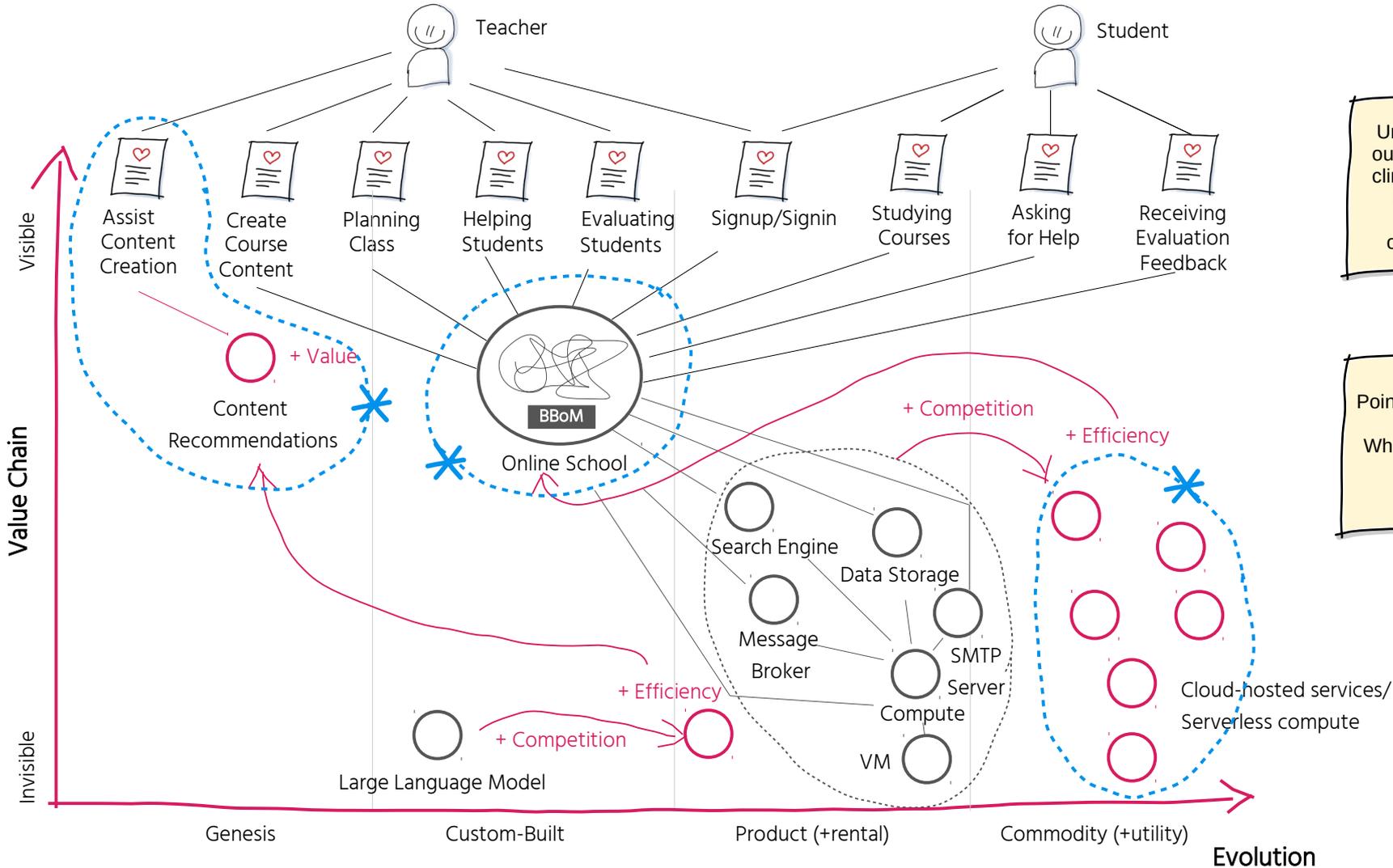
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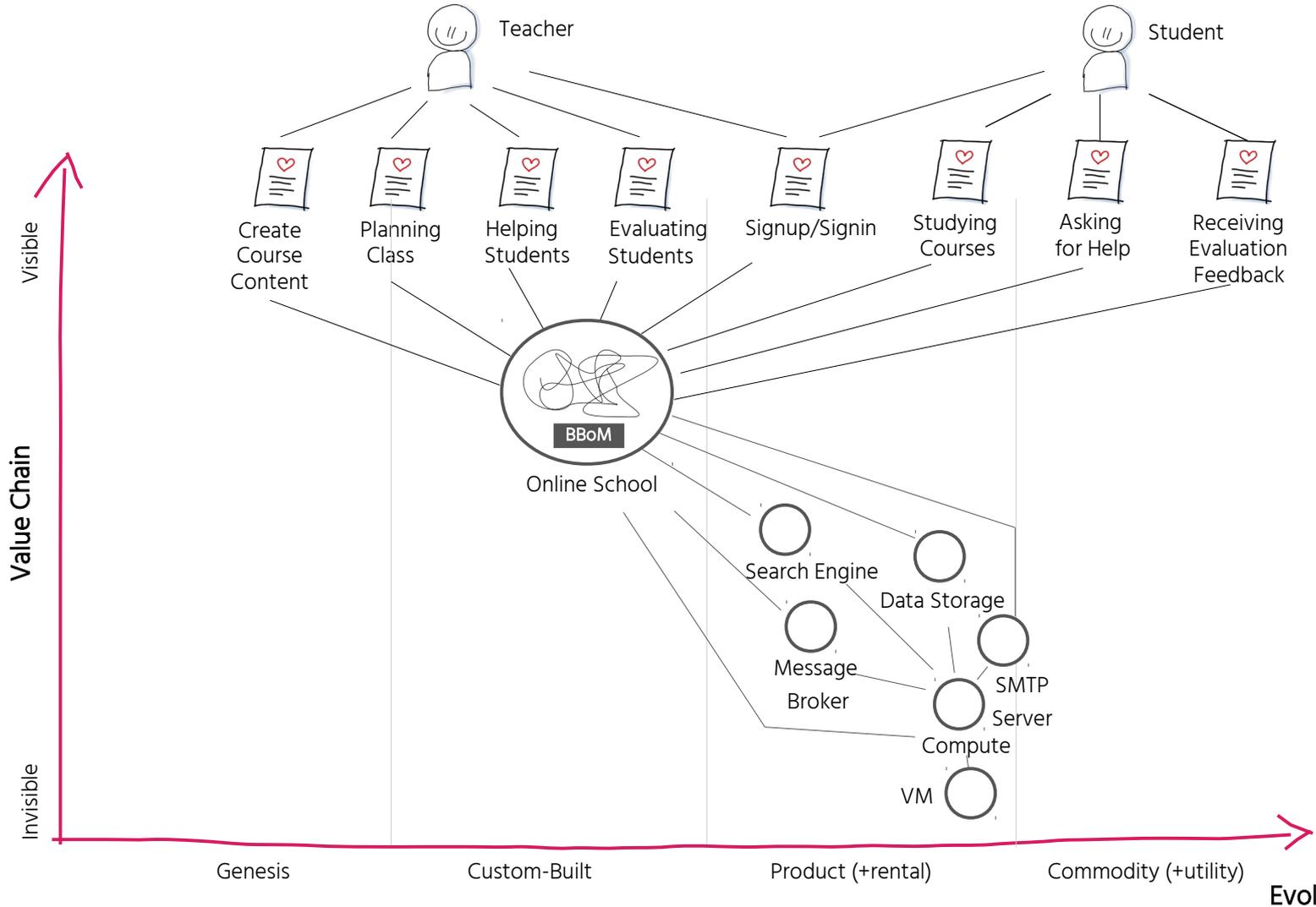
External Forces Impacting the Landscape: Climatic Patterns



Understanding Landscape & Climatic Patterns

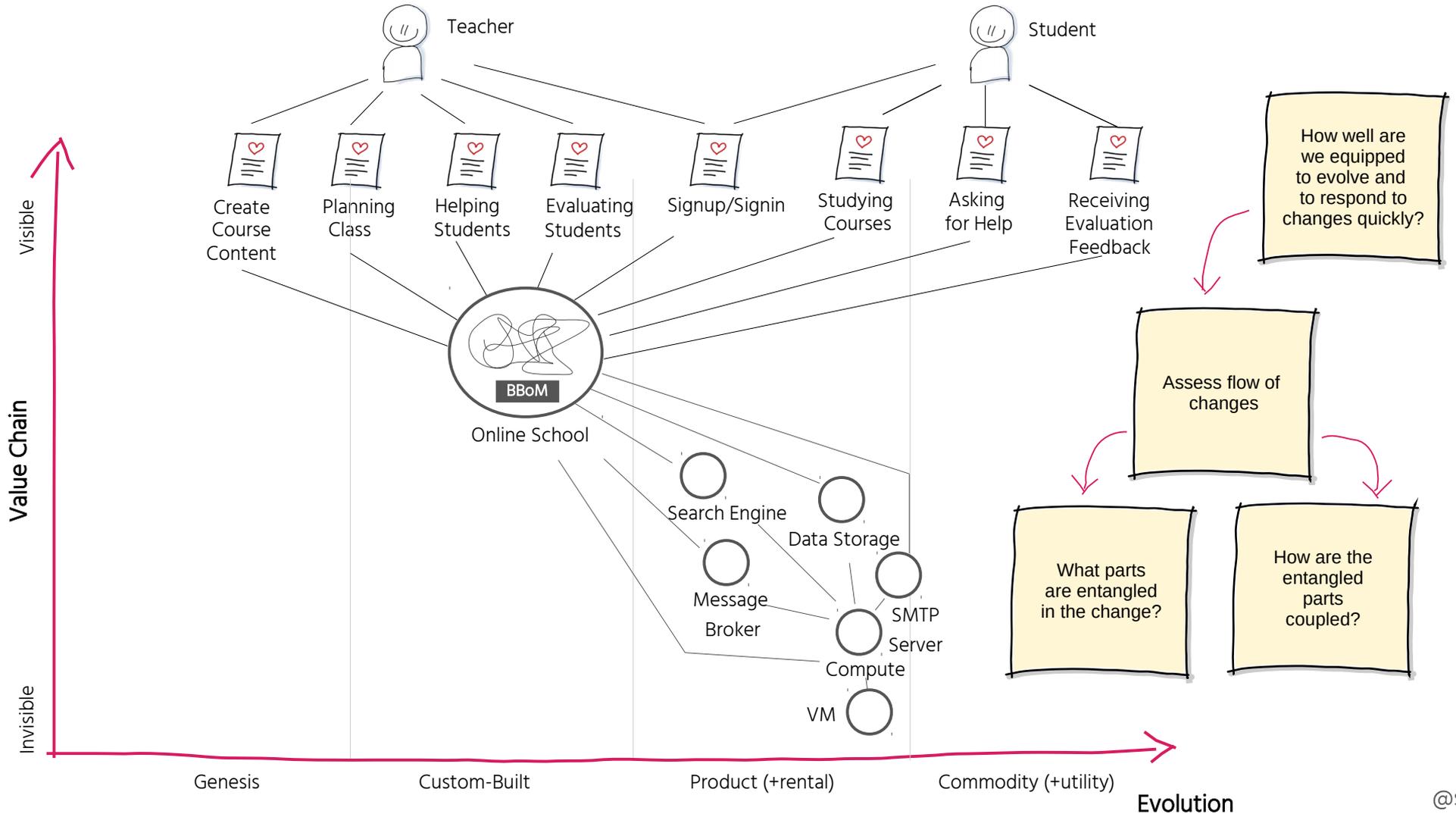


Assessing Responsiveness to Change

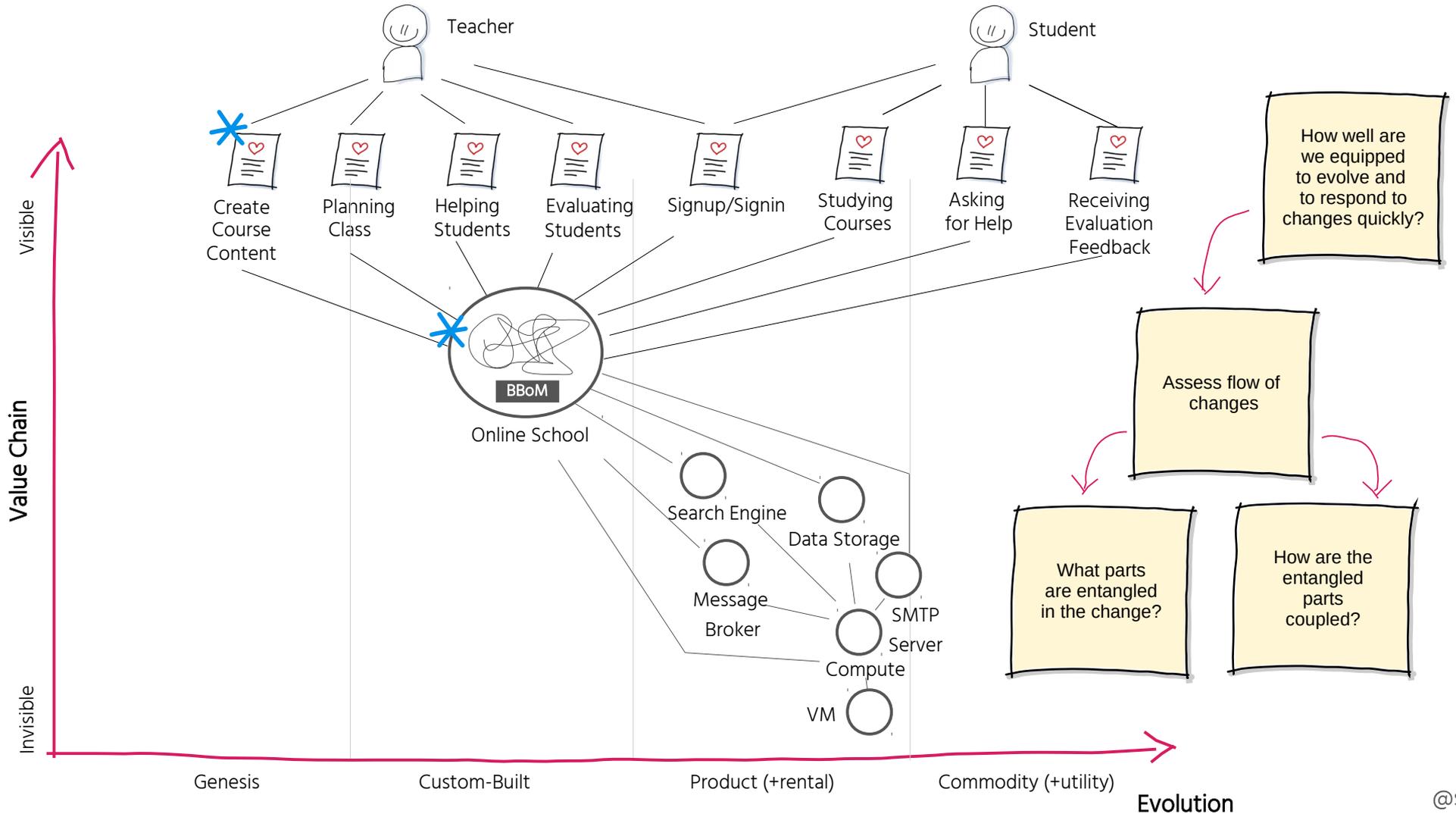


How well are we equipped to respond to changes quickly?

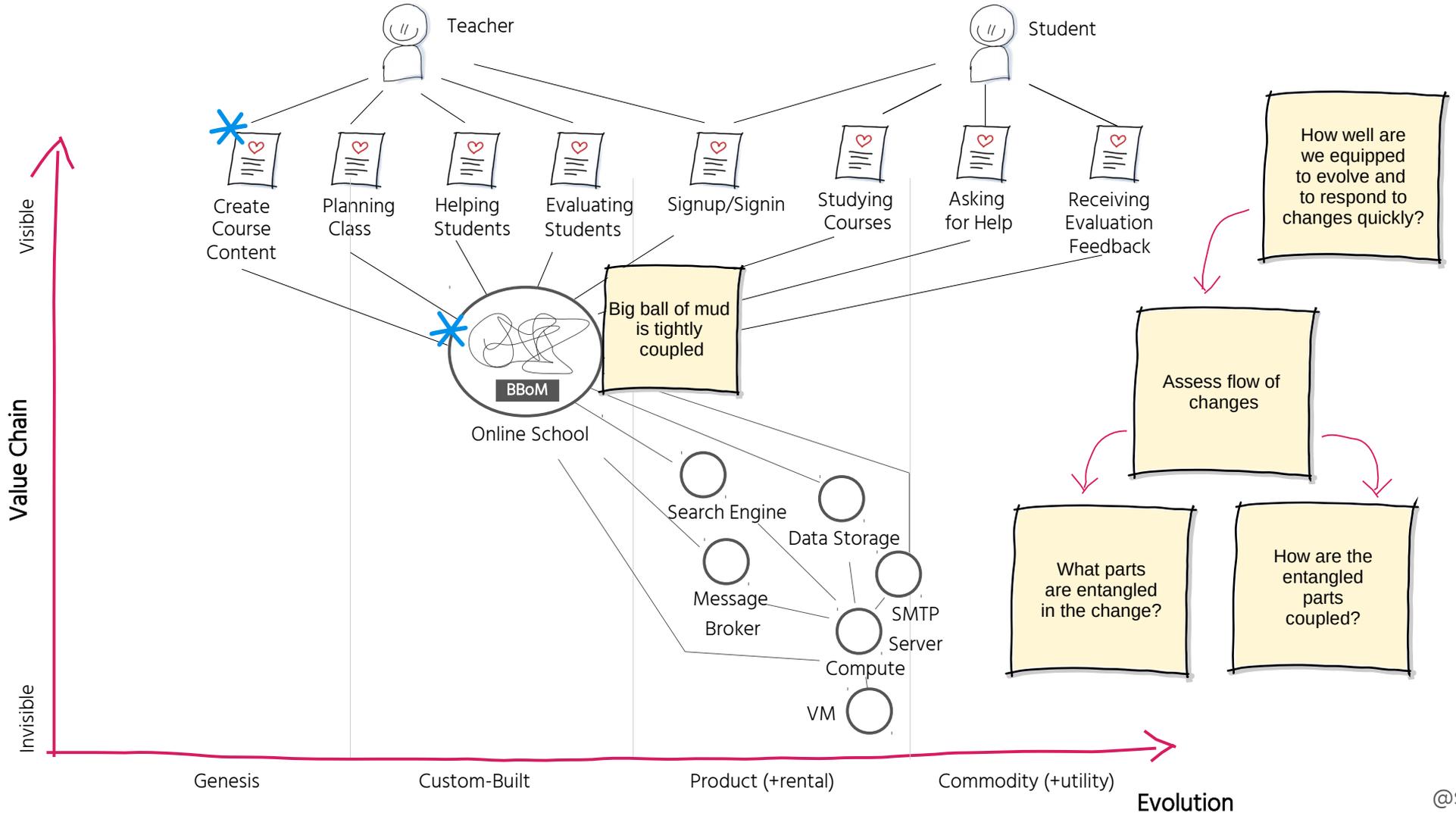
Assessing Responsiveness to Change



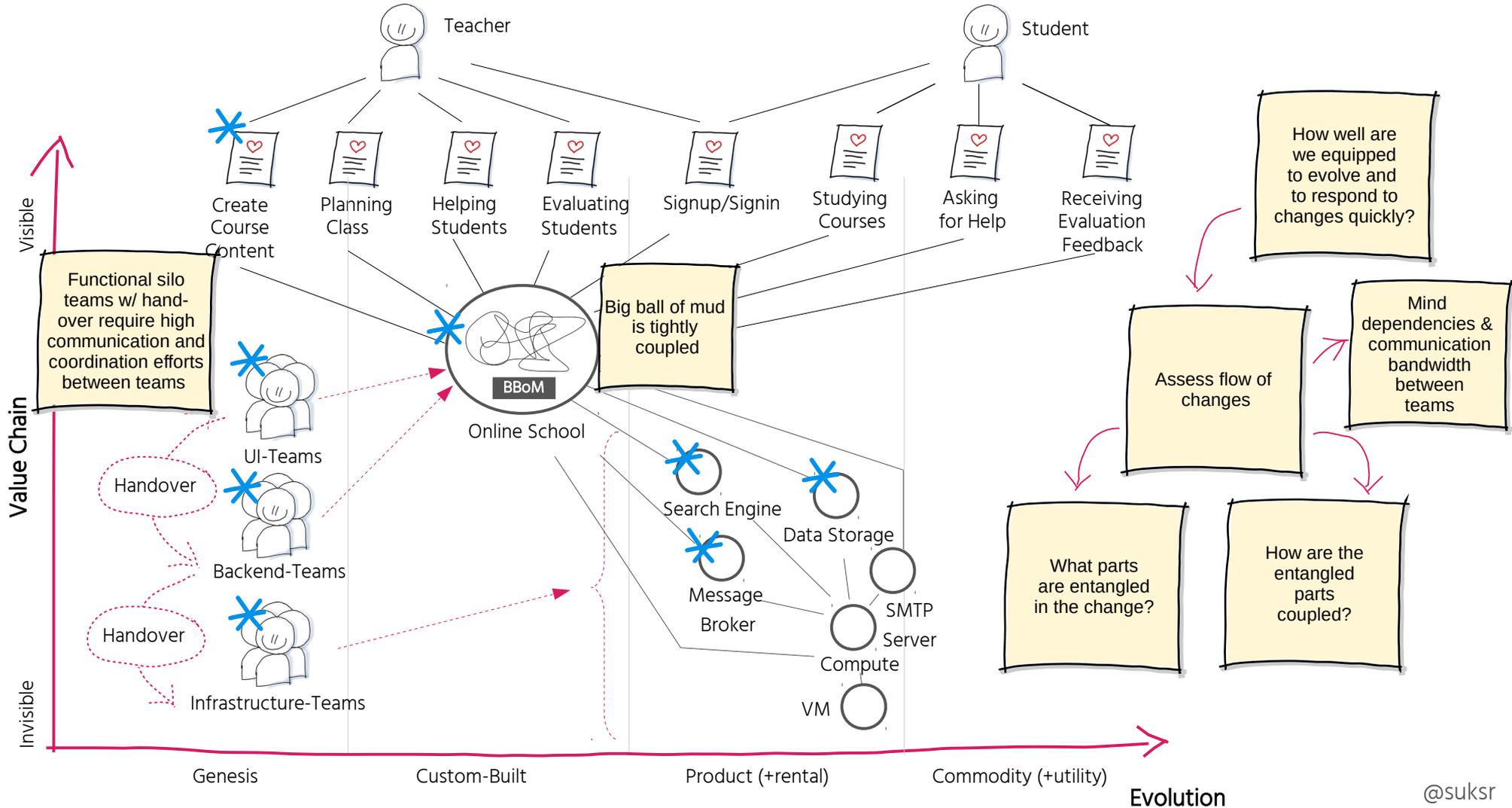
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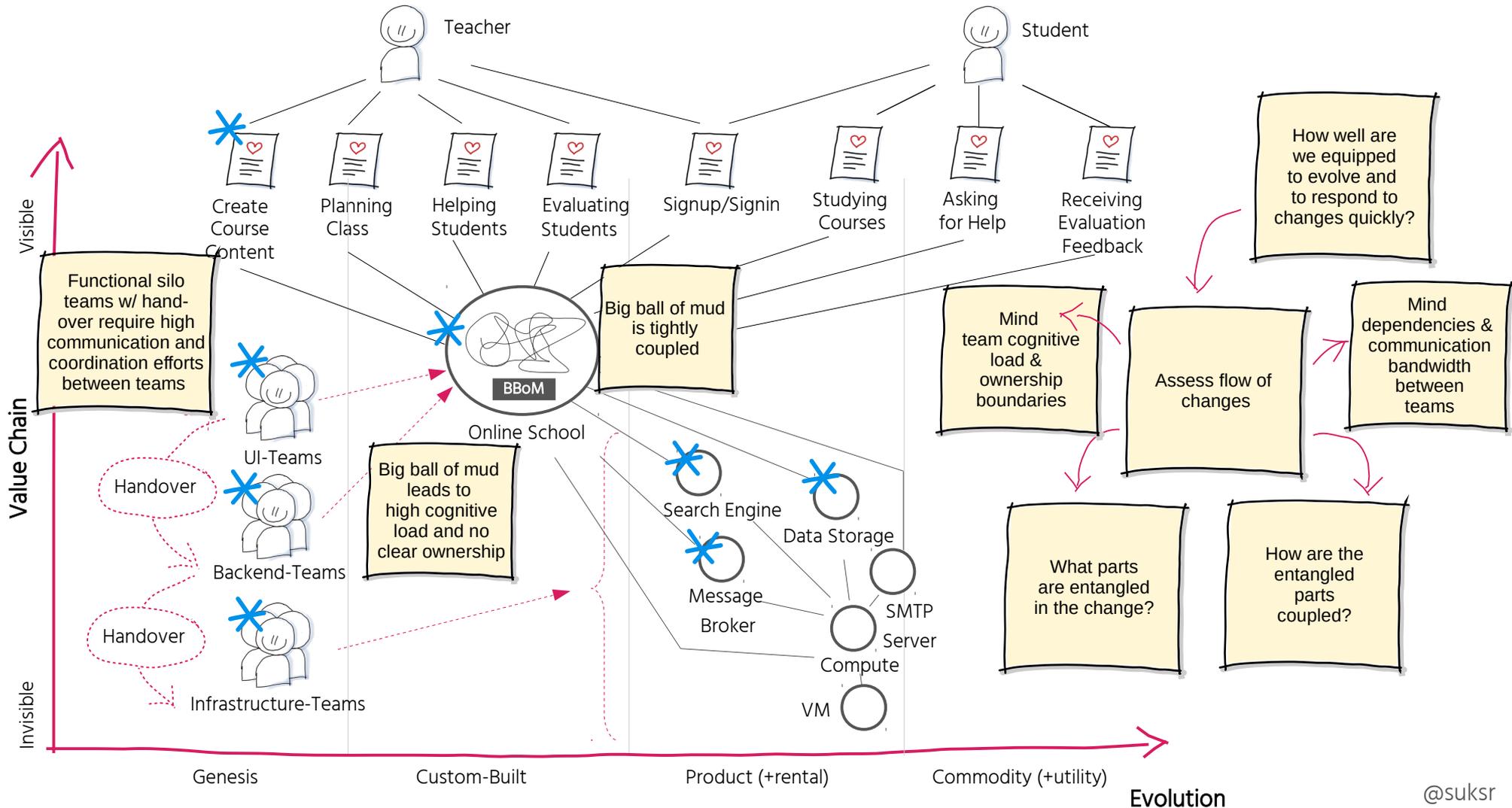
Assessing Responsiveness to Change



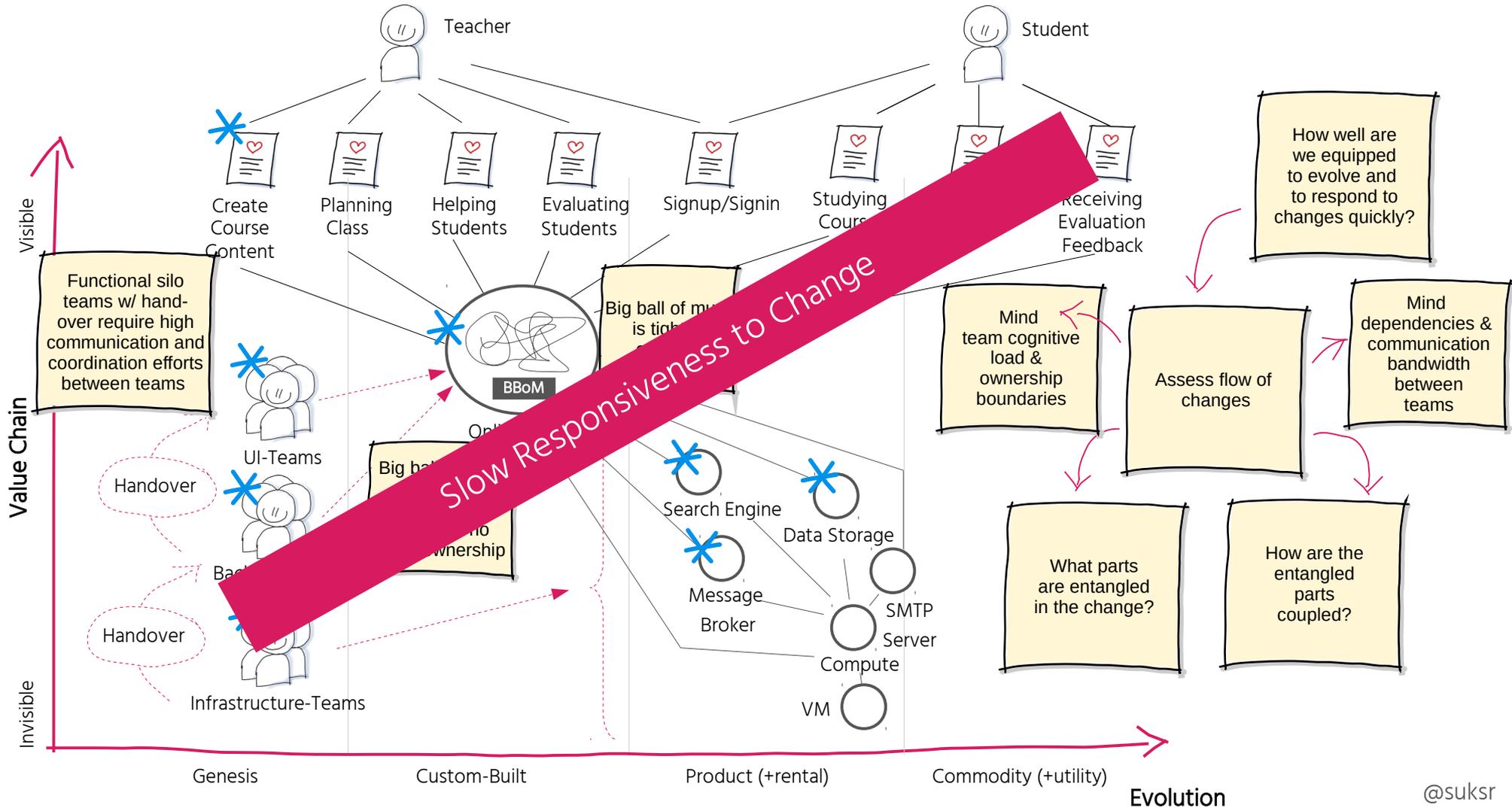
Assessing Responsiveness to Change



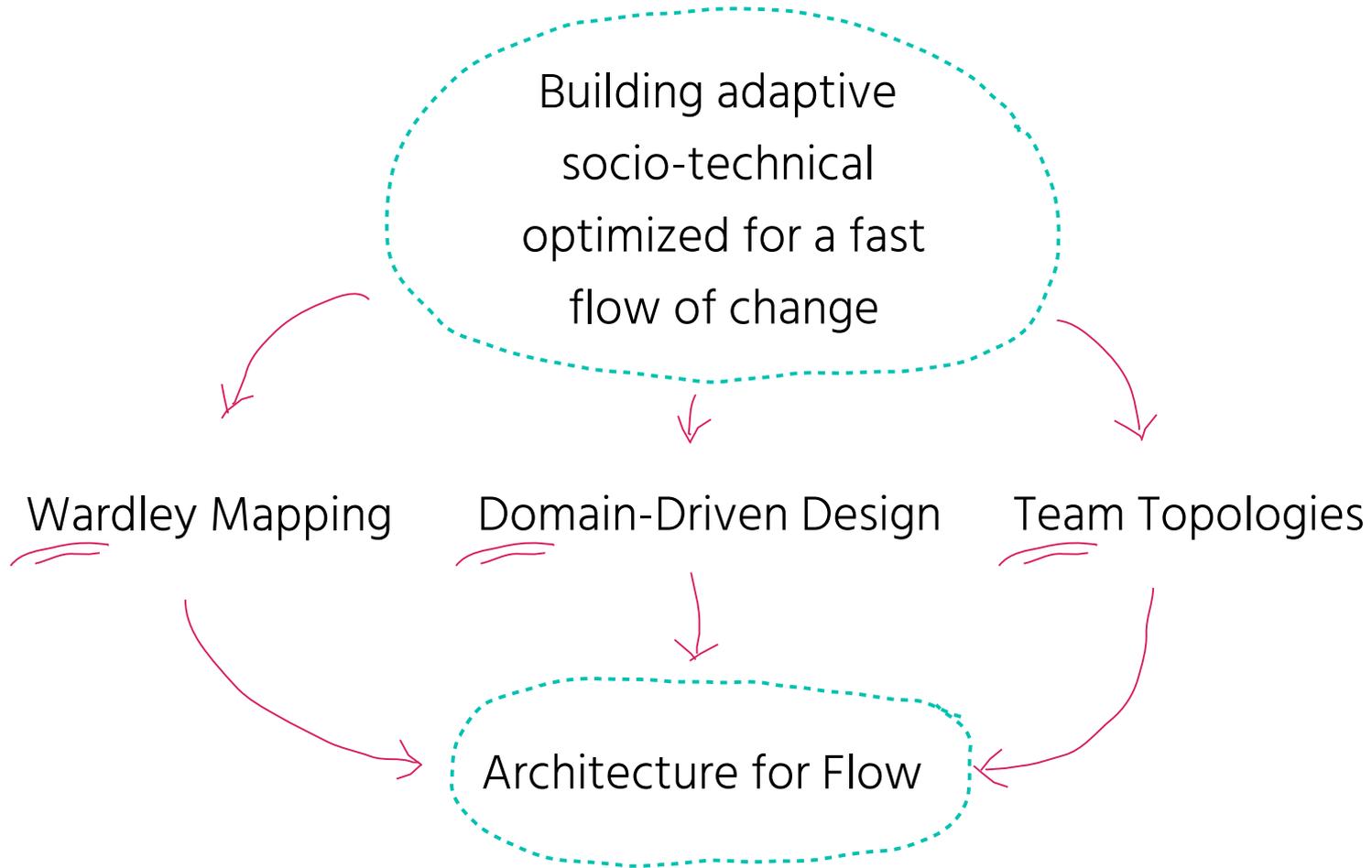
Assessing Responsiveness to Change



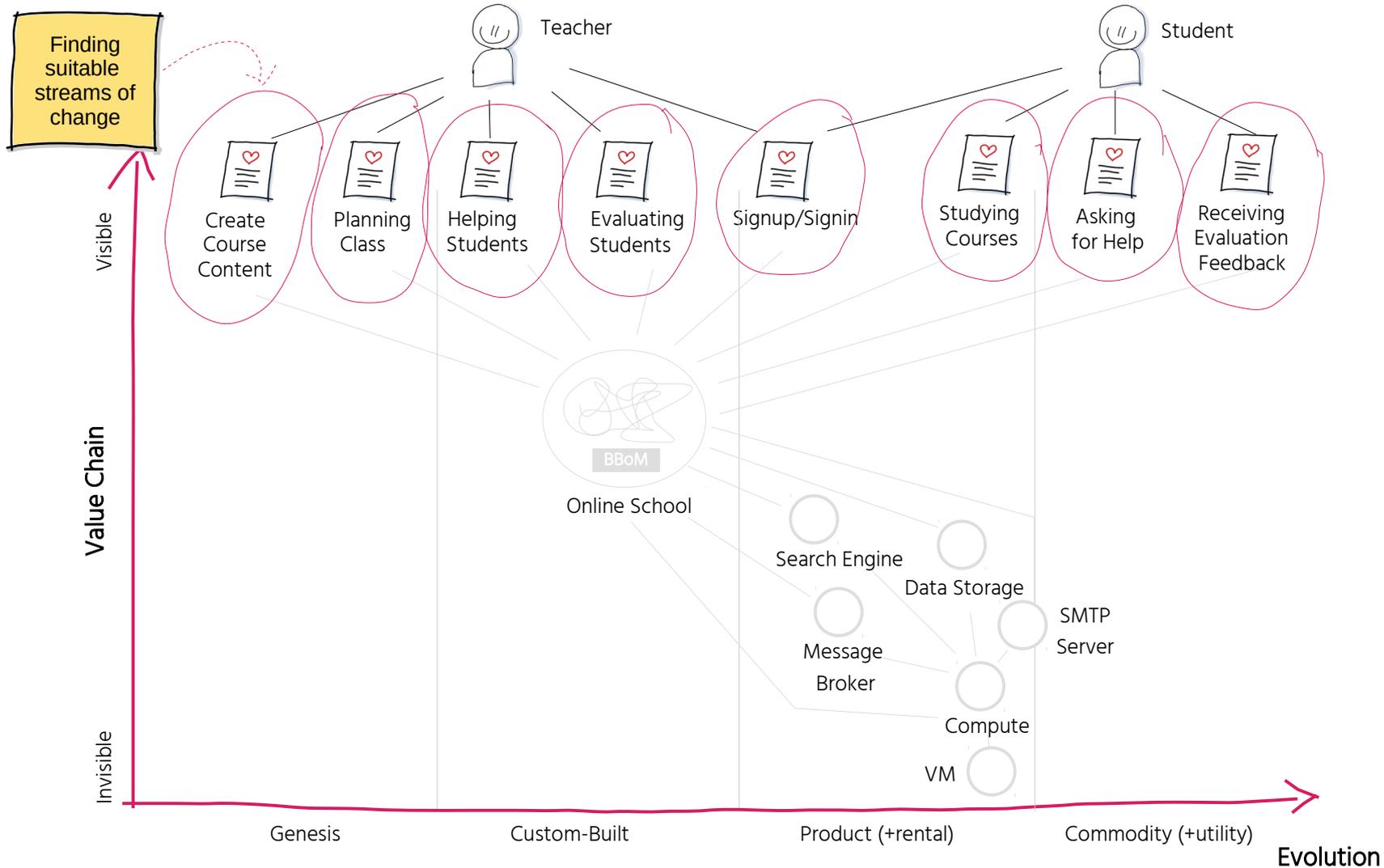
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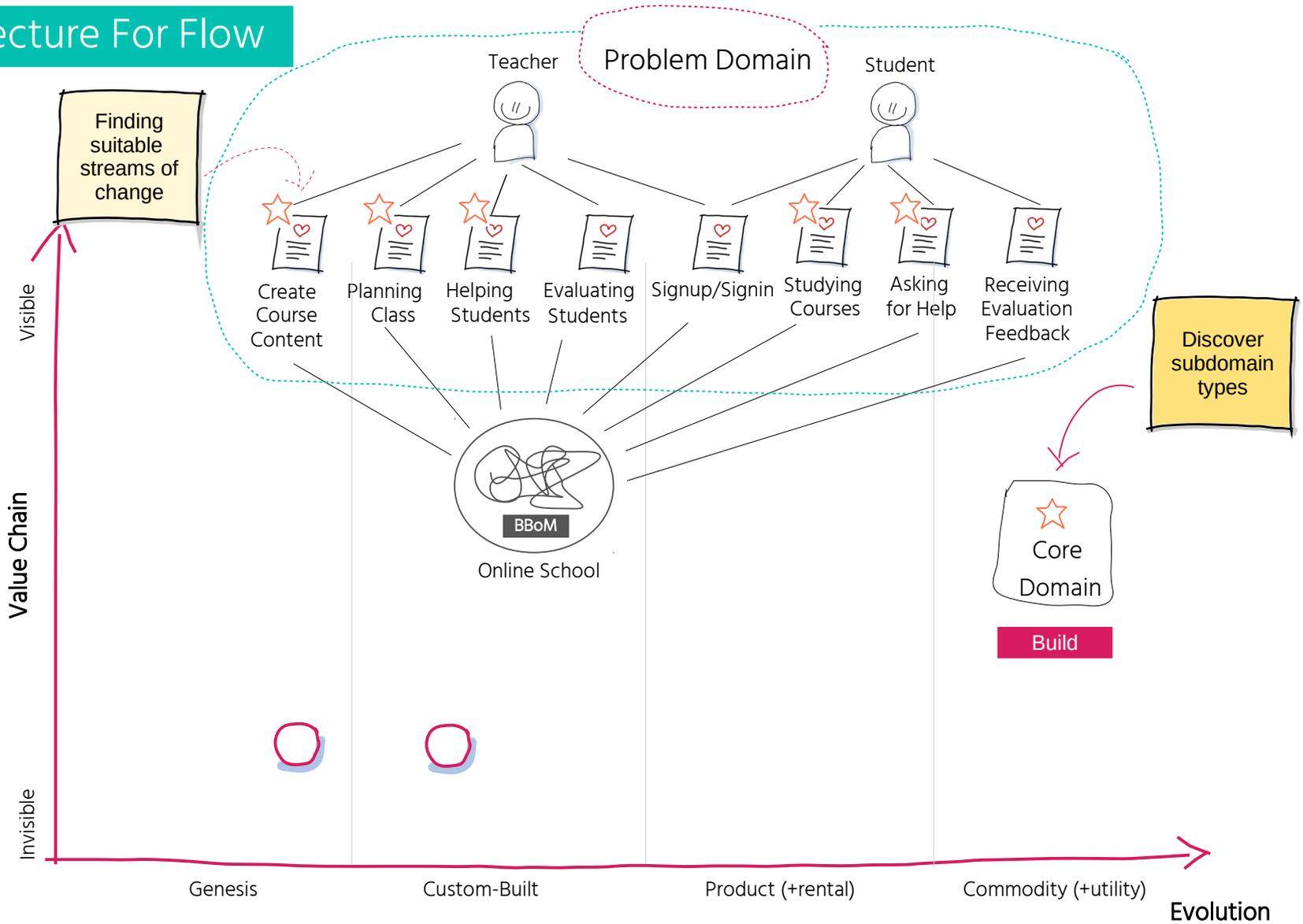
Architecture for Flow



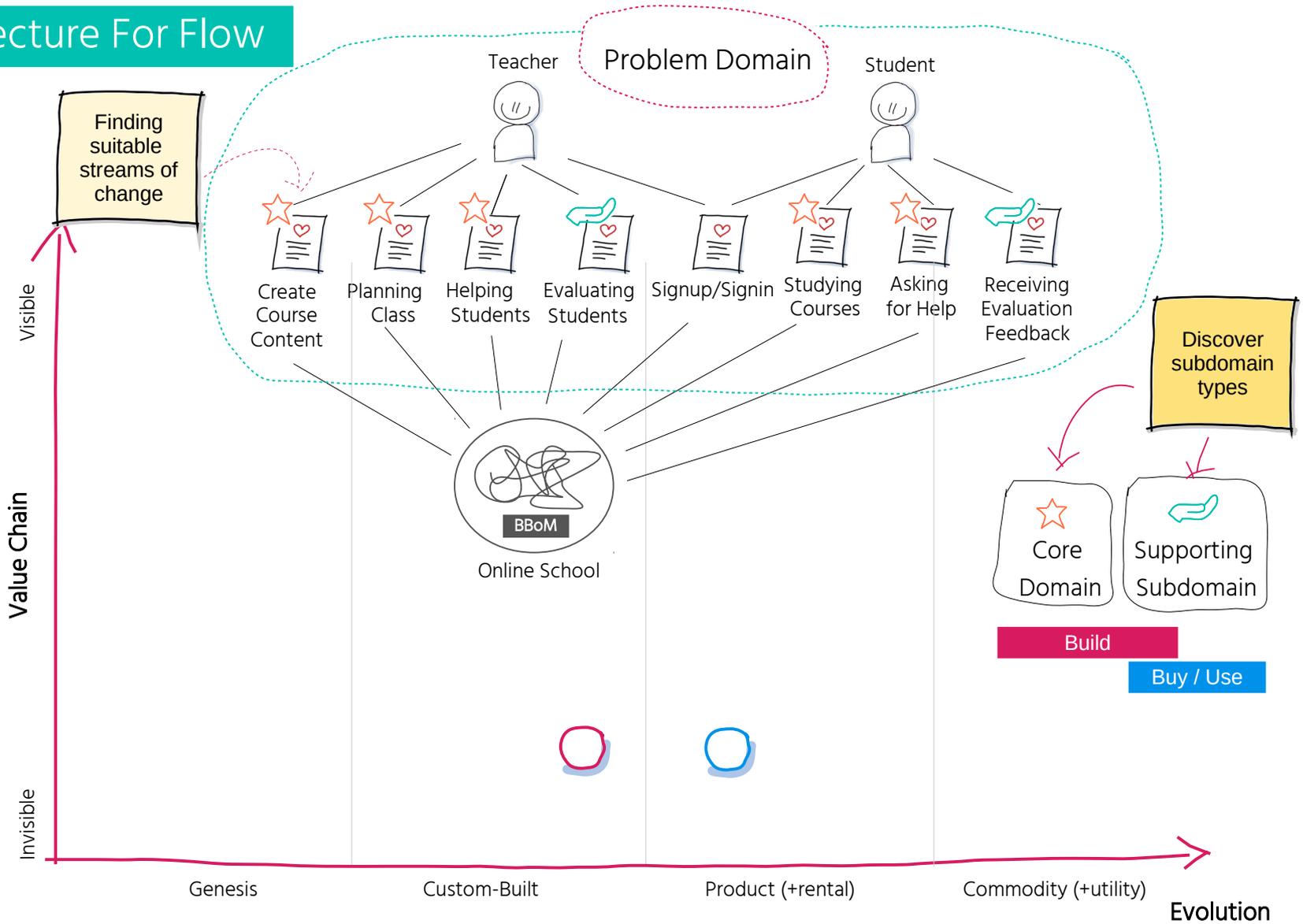
Architecture For Flow



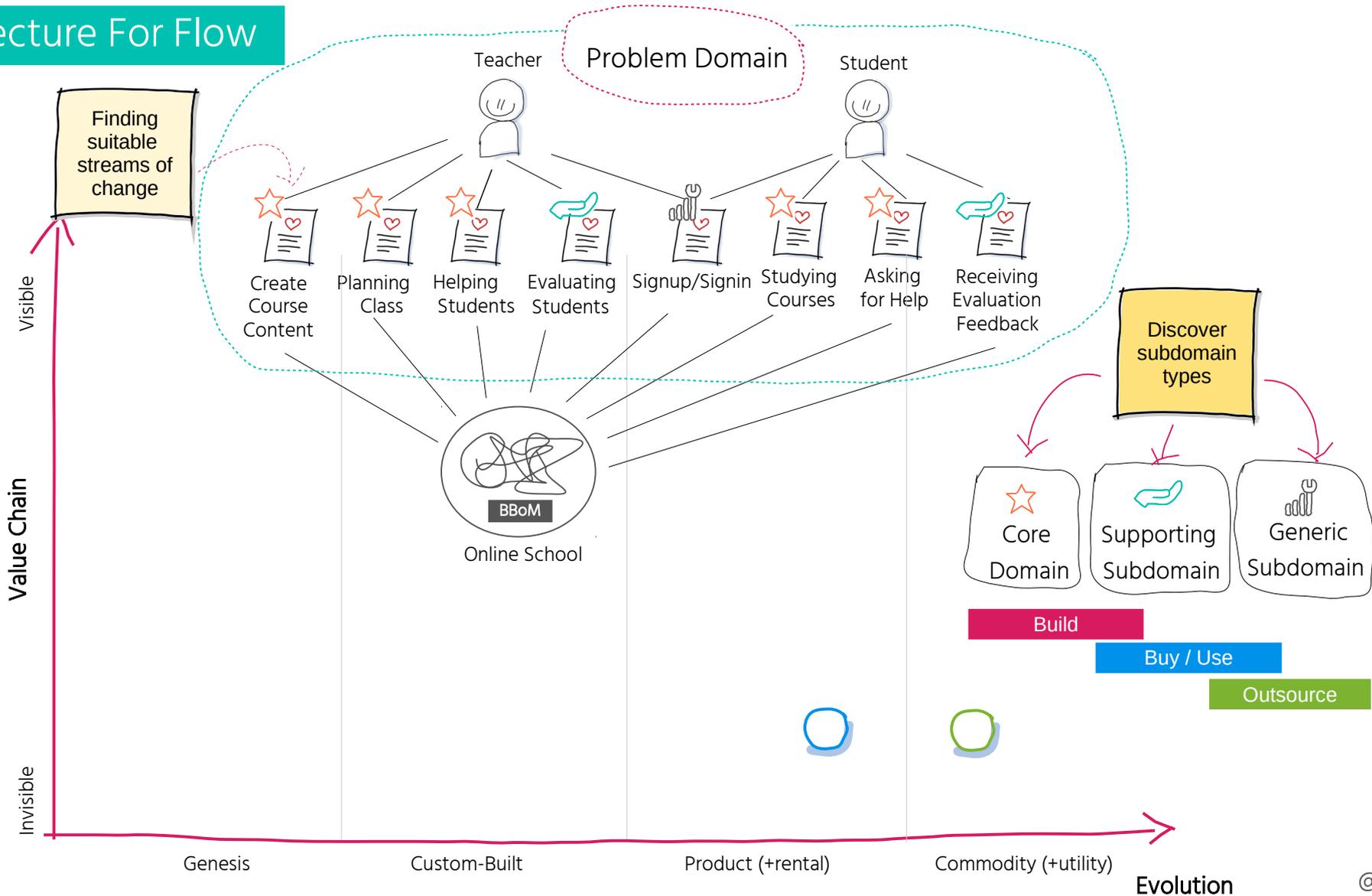
Architecture For Flow



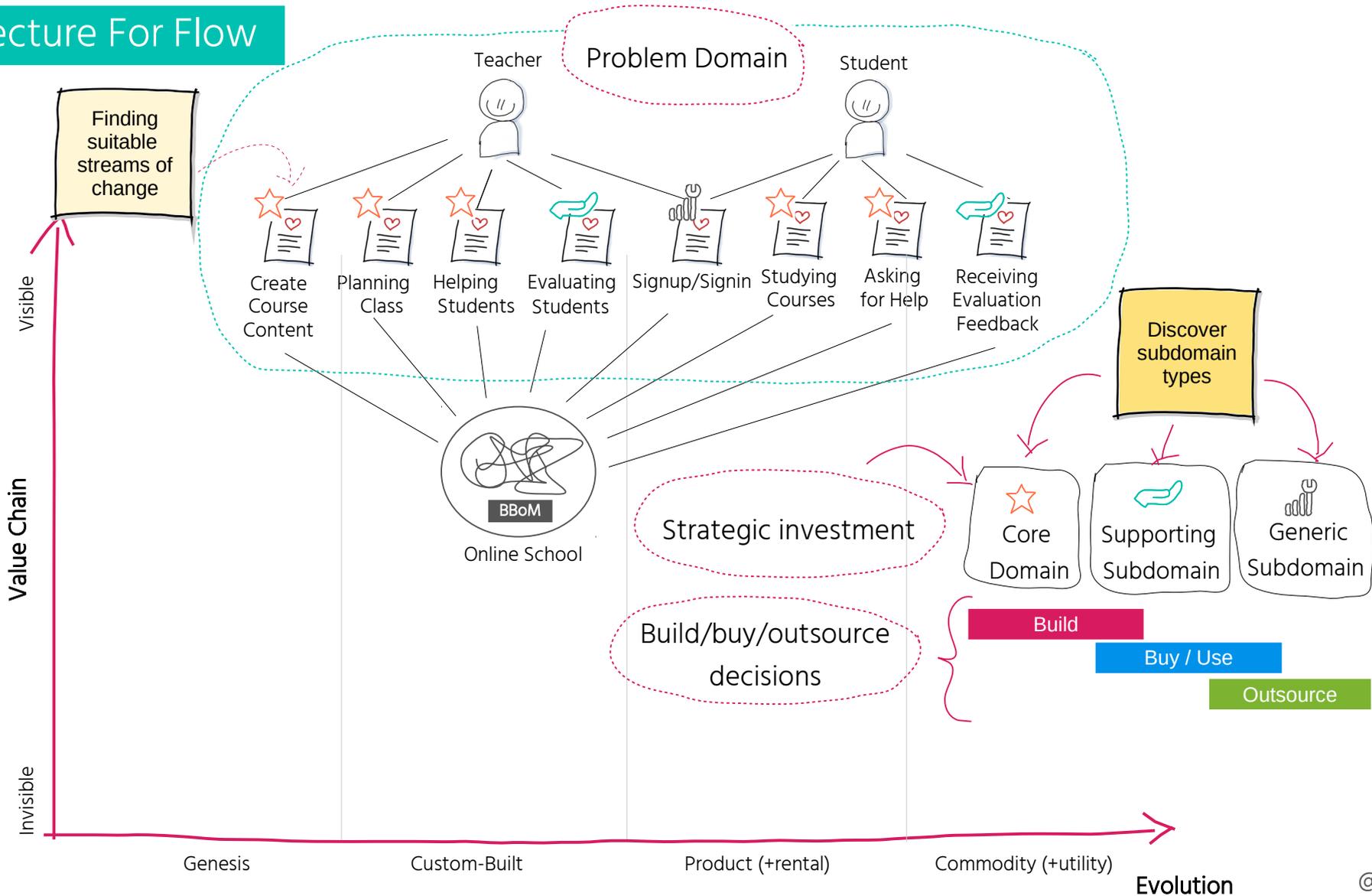
Architecture For Flow



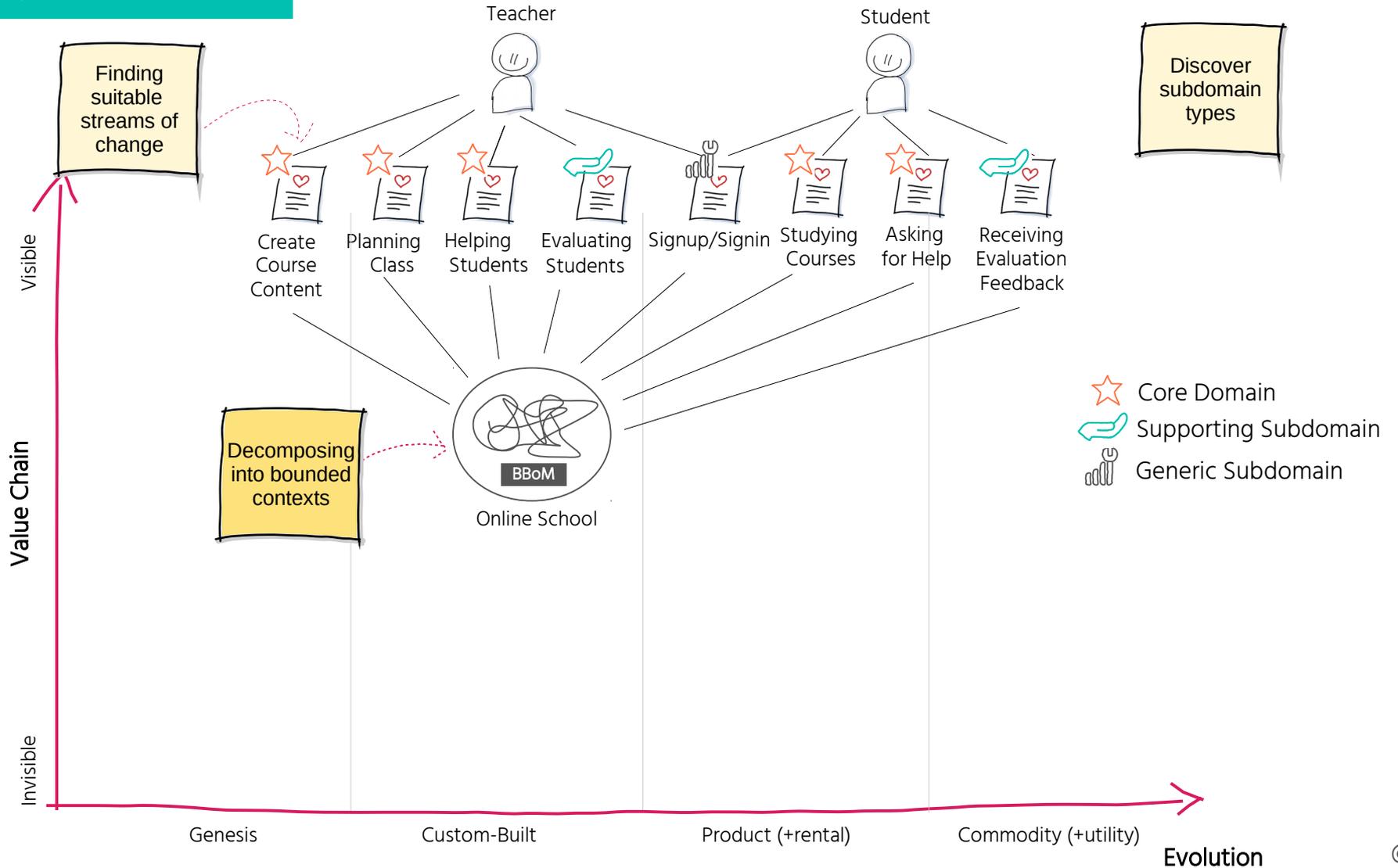
Architecture For Flow



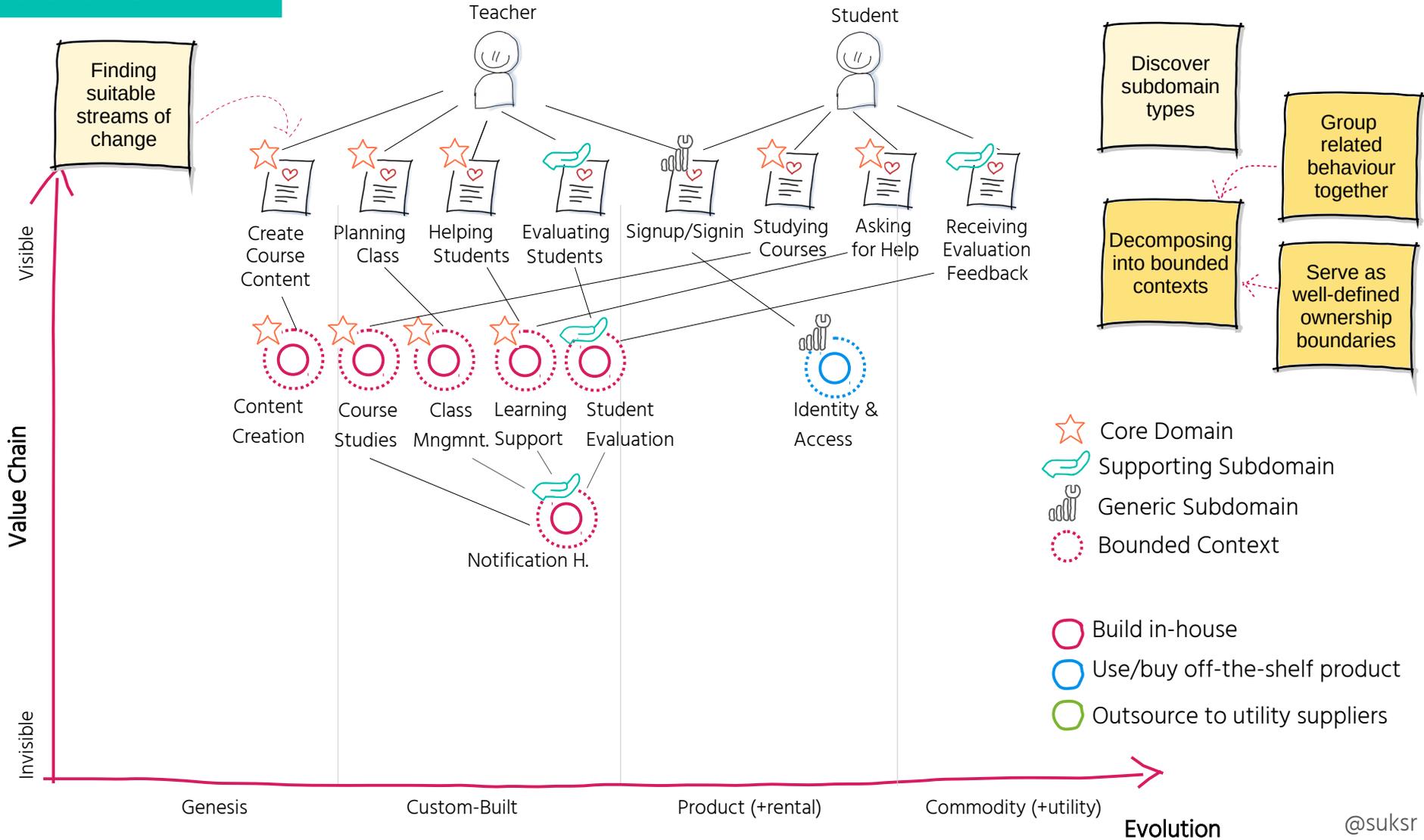
Architecture For Flow



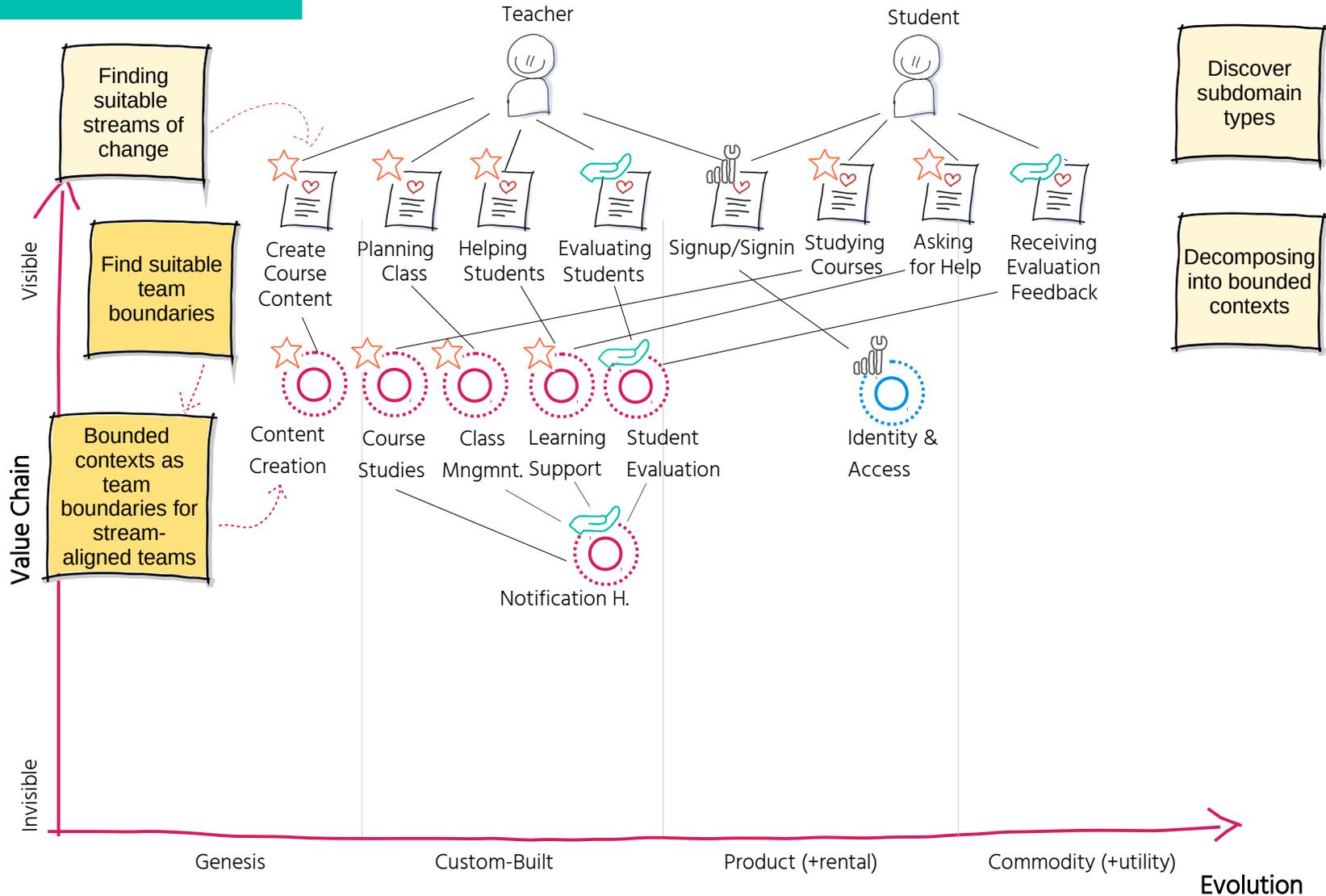
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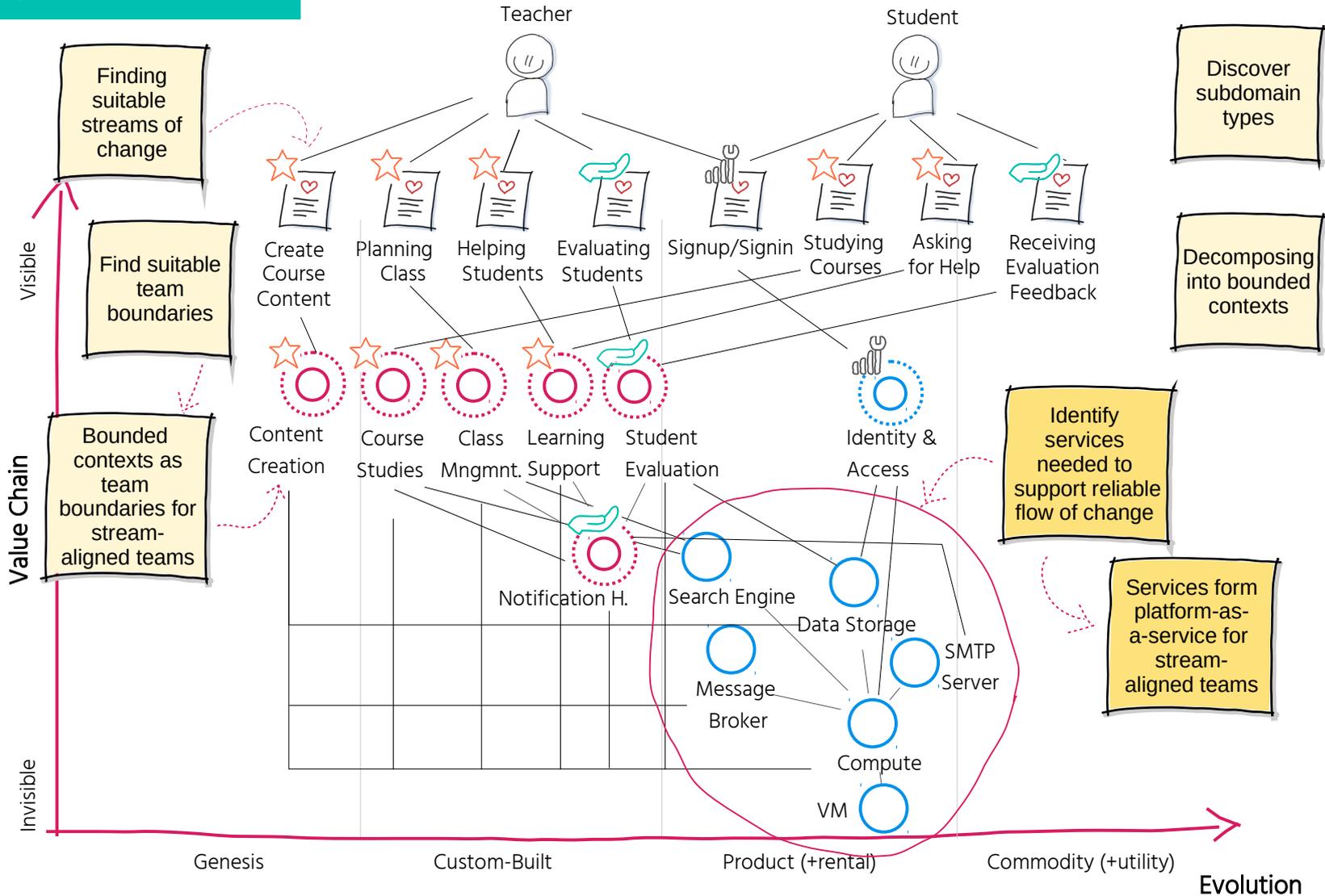
Architecture For Flow



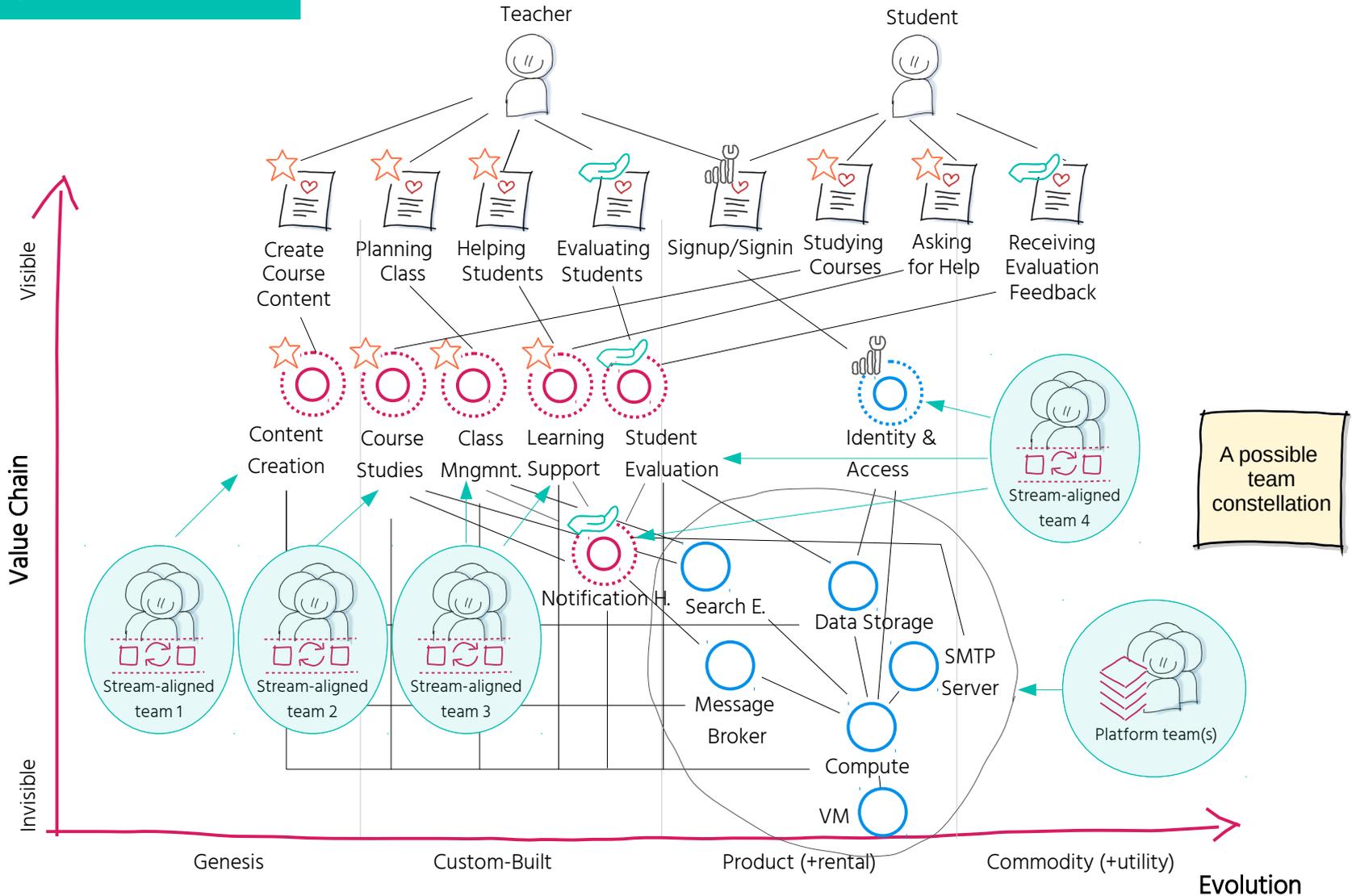
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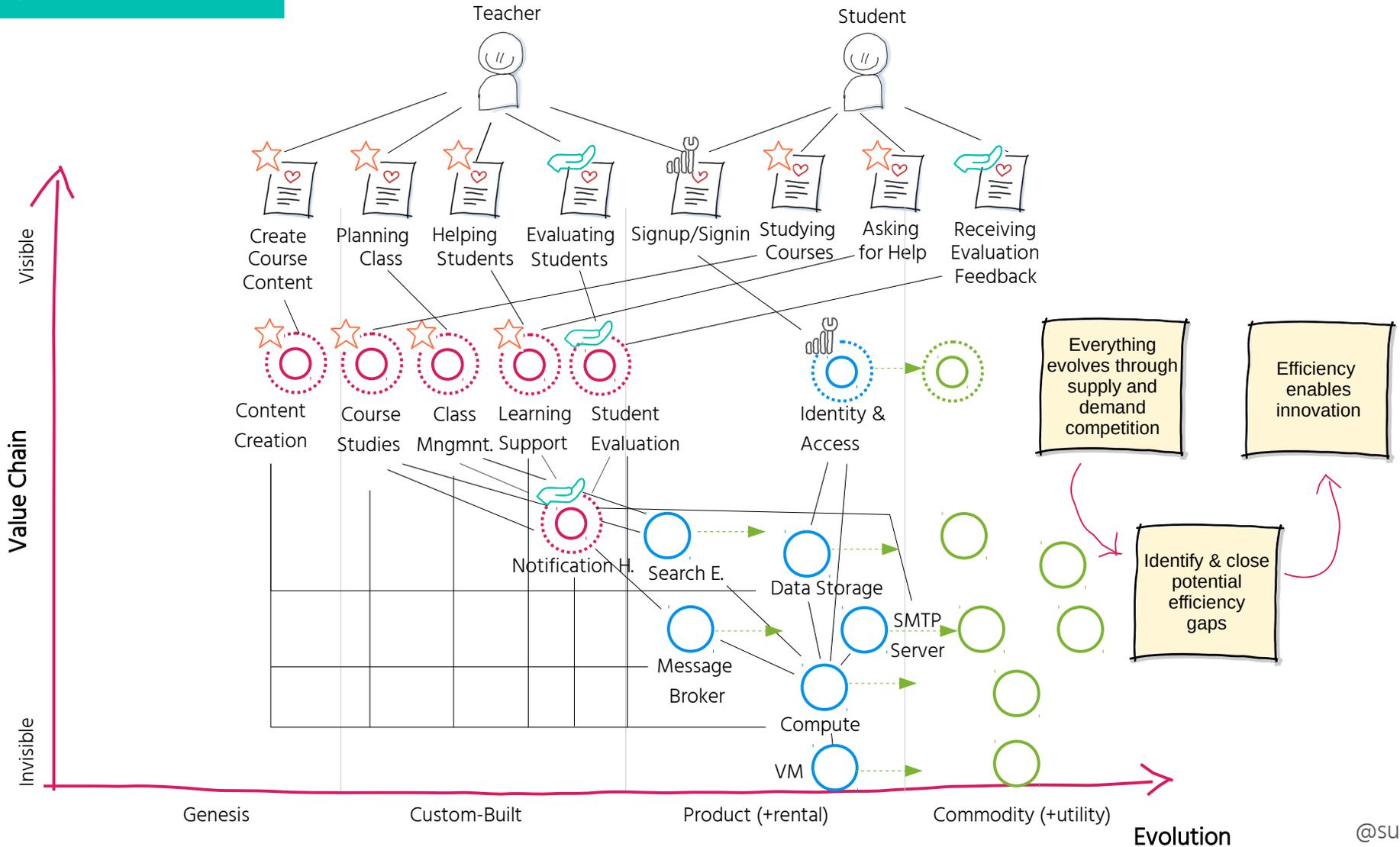
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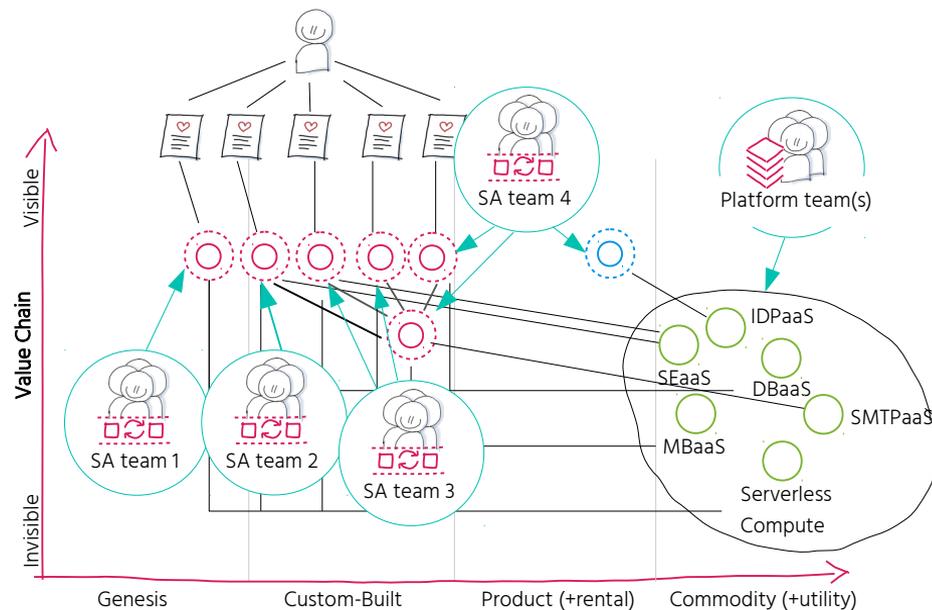
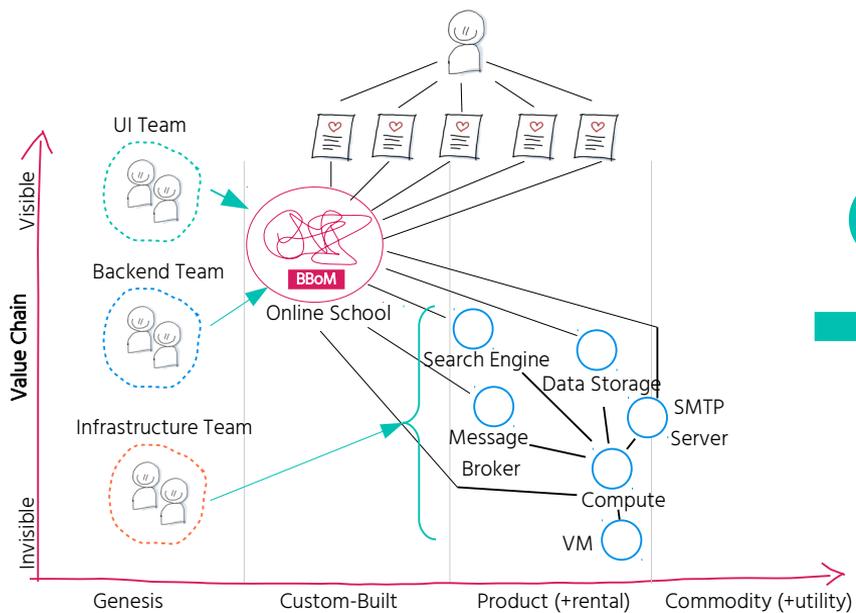
Architecture For Flow



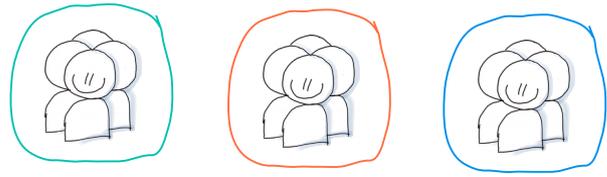
Architecture For Flow



How to transition?



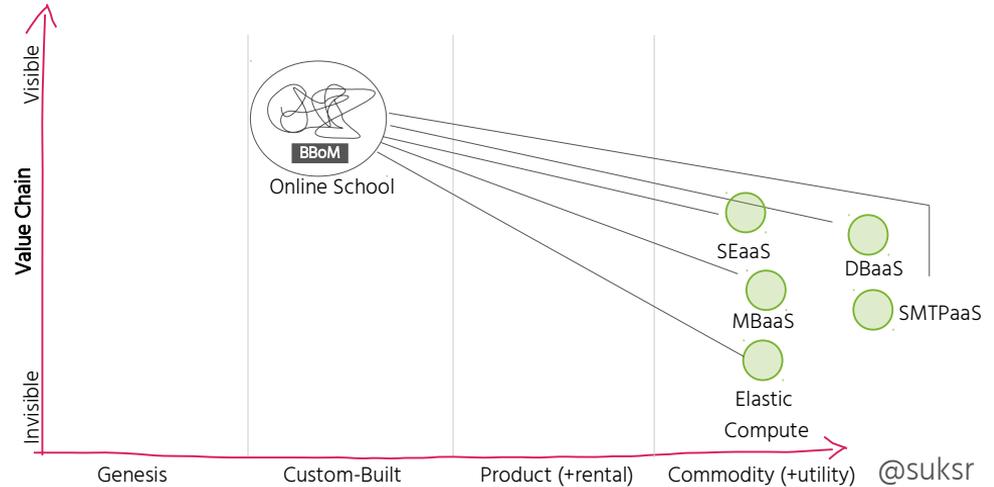
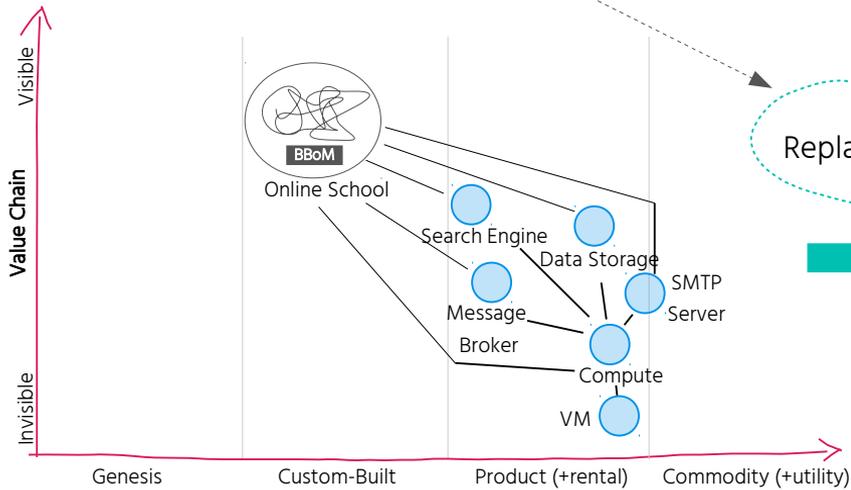
Evolution of Team Topologies



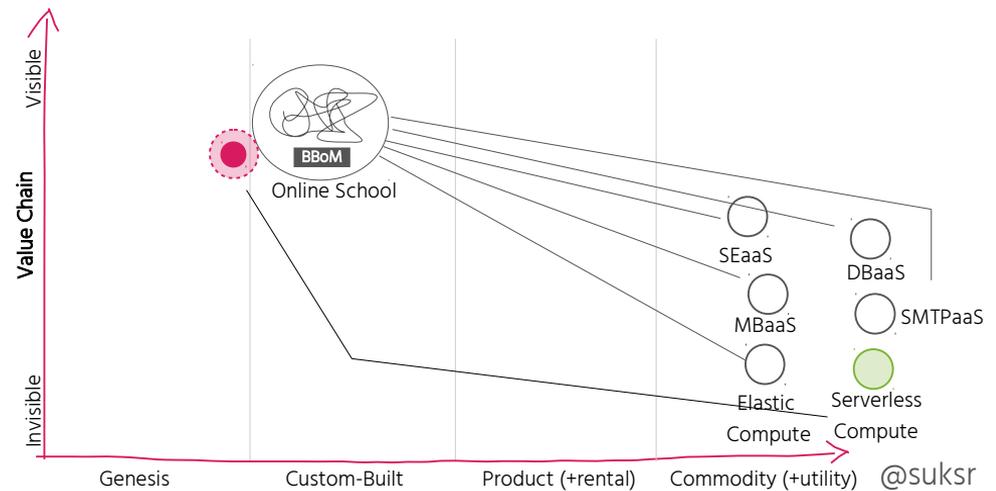
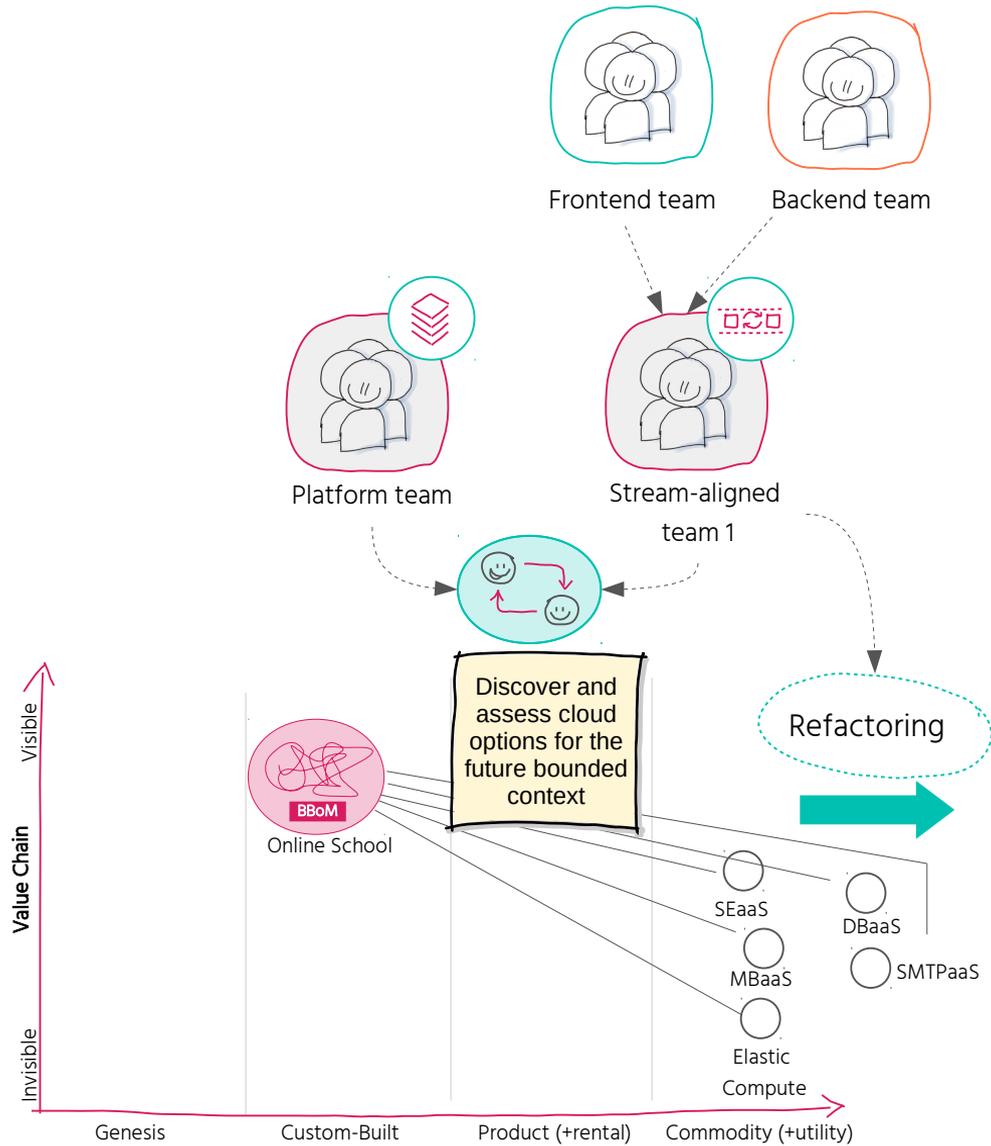
Frontend team Backend team Infrastructure team



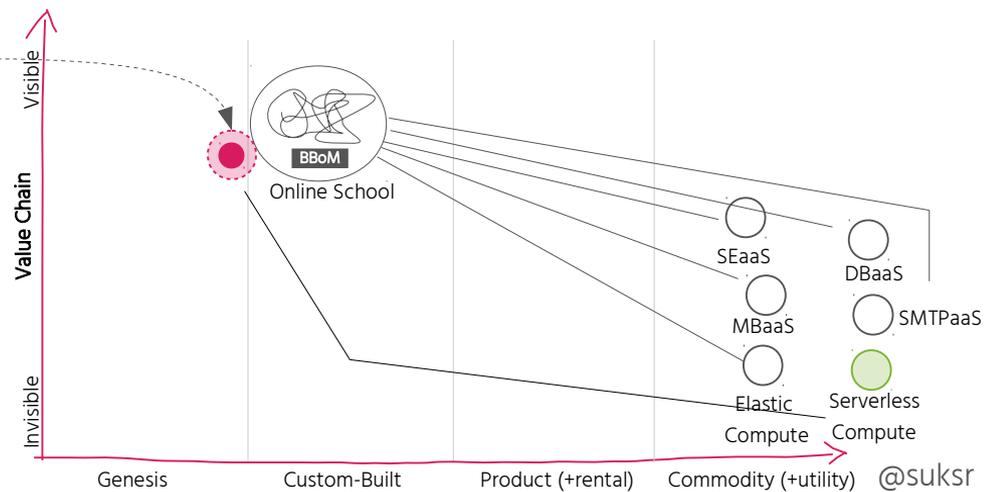
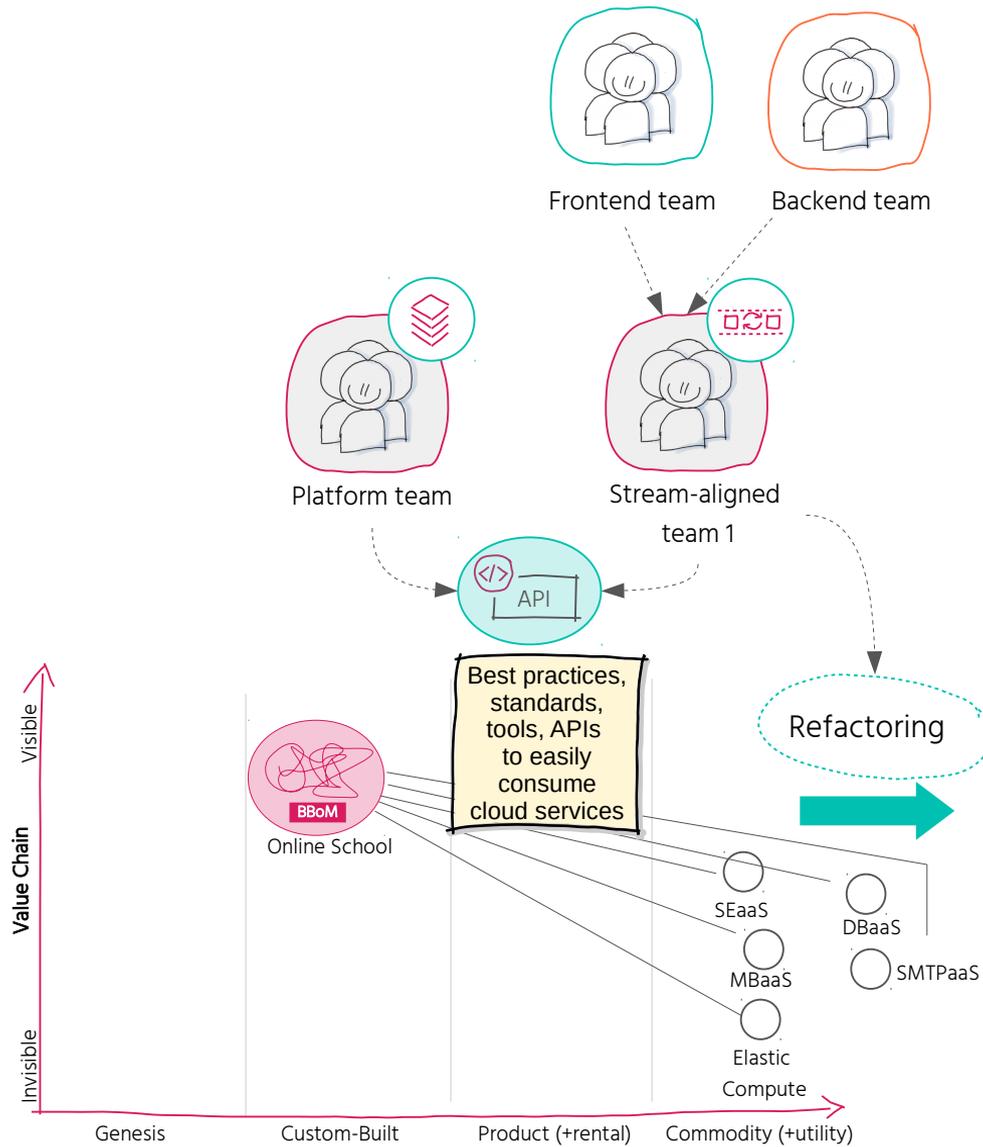
Platform team



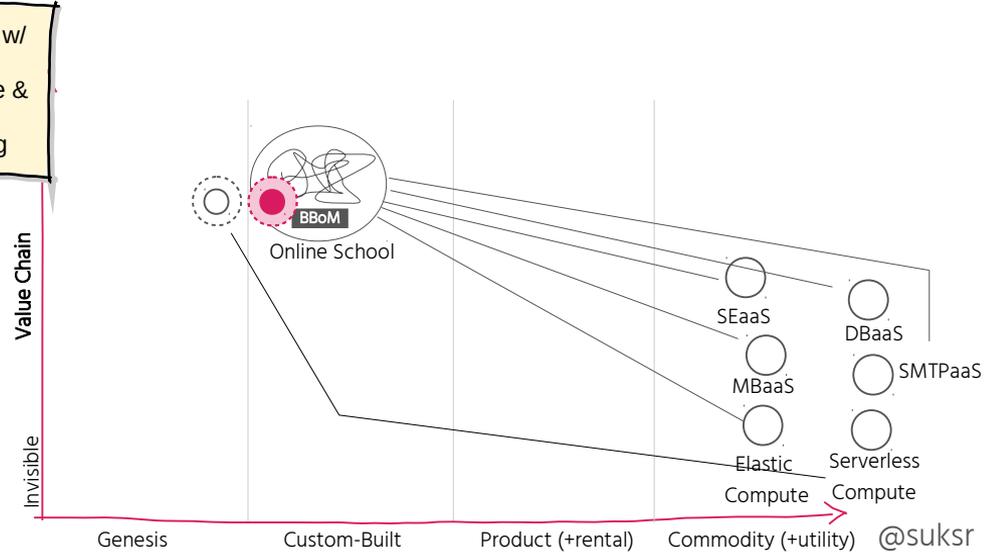
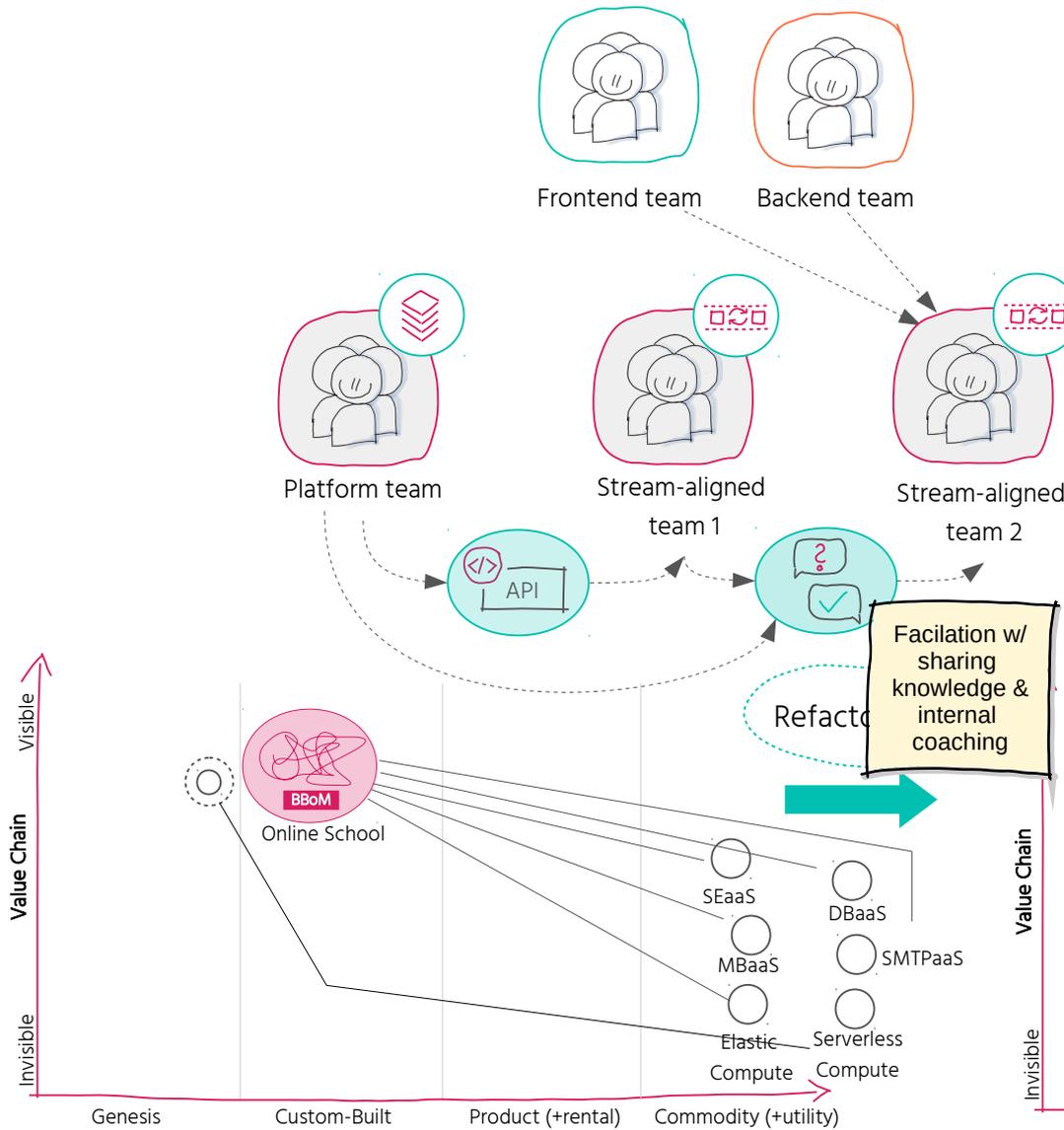
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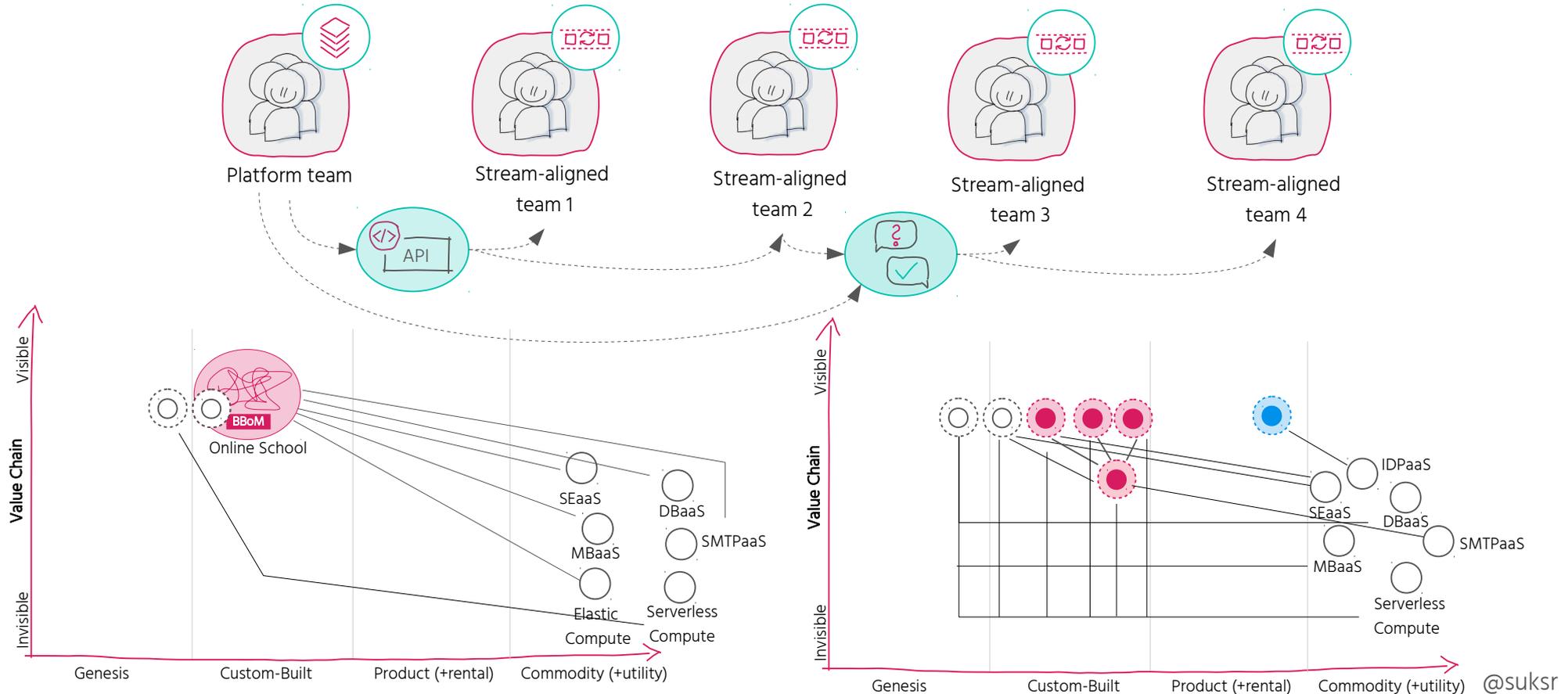
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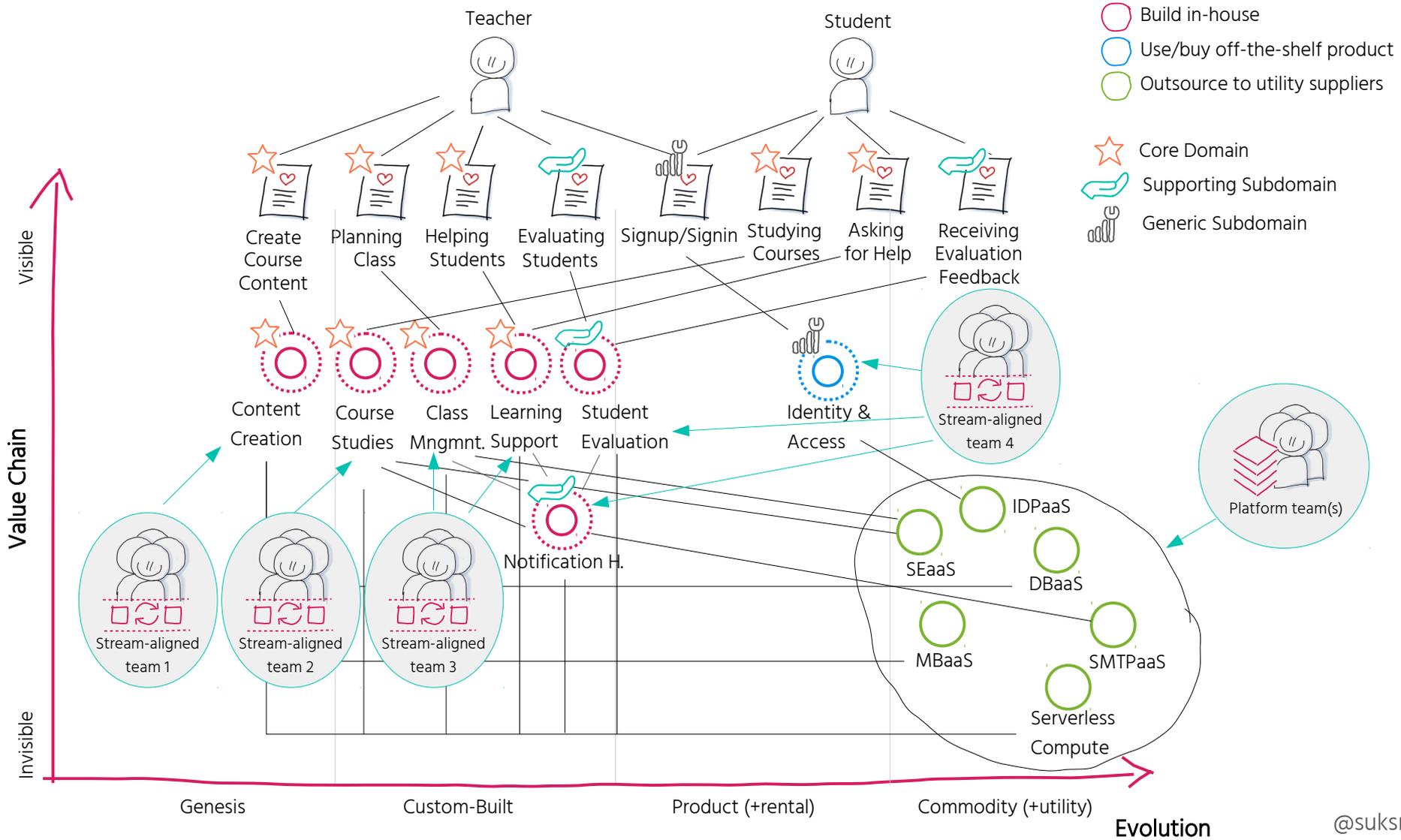


Evolution of Team Topologies

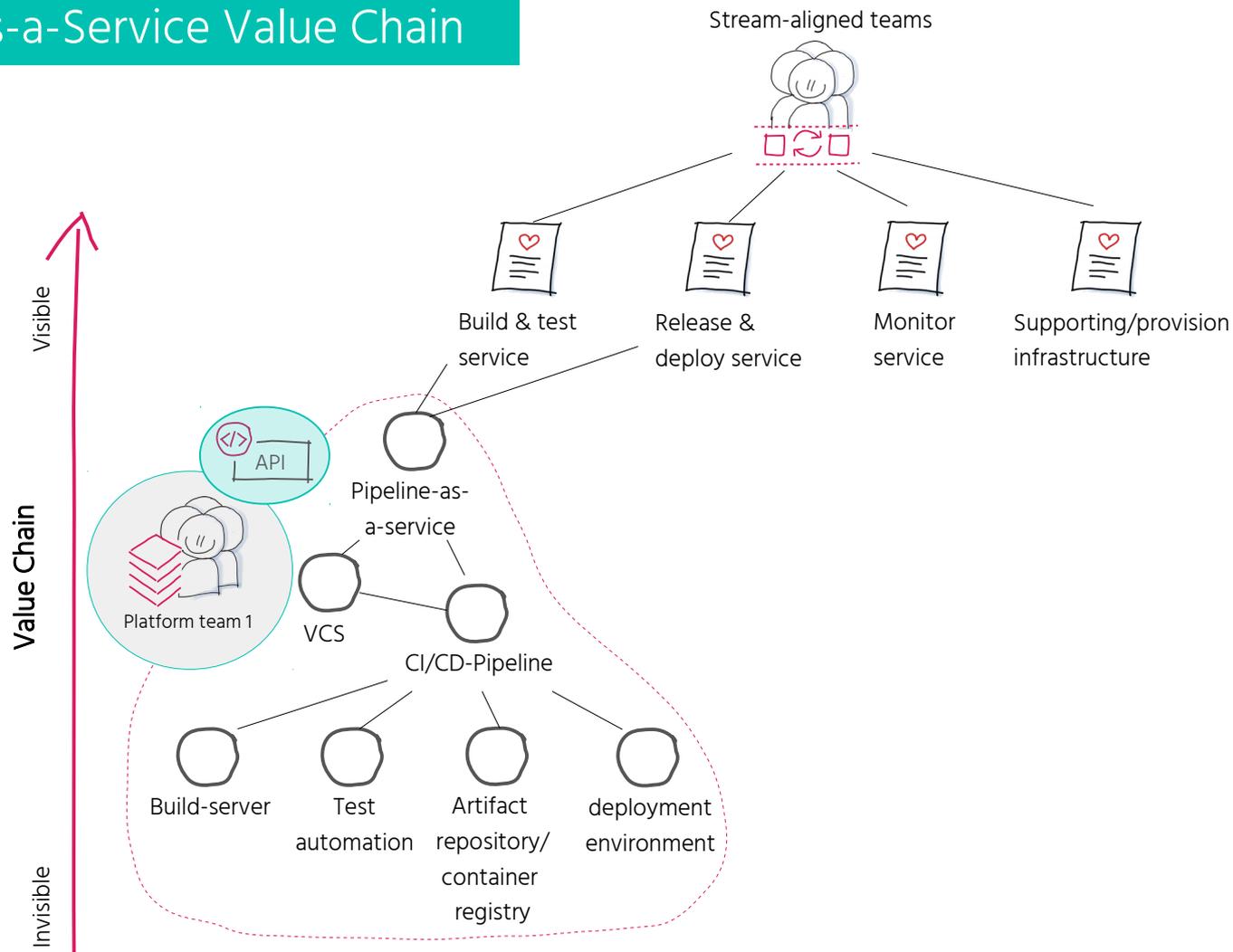


Evolution of Team Topologies

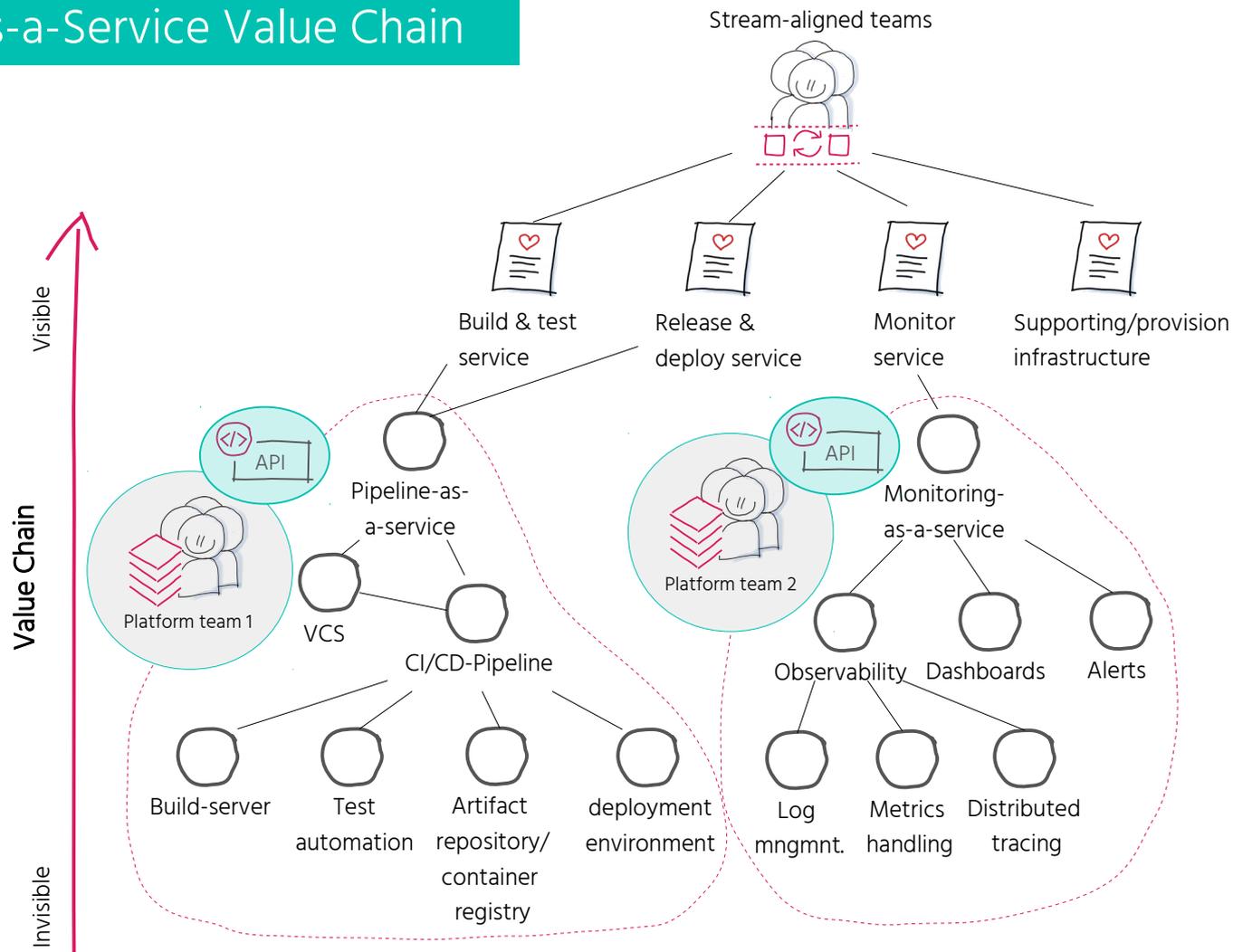




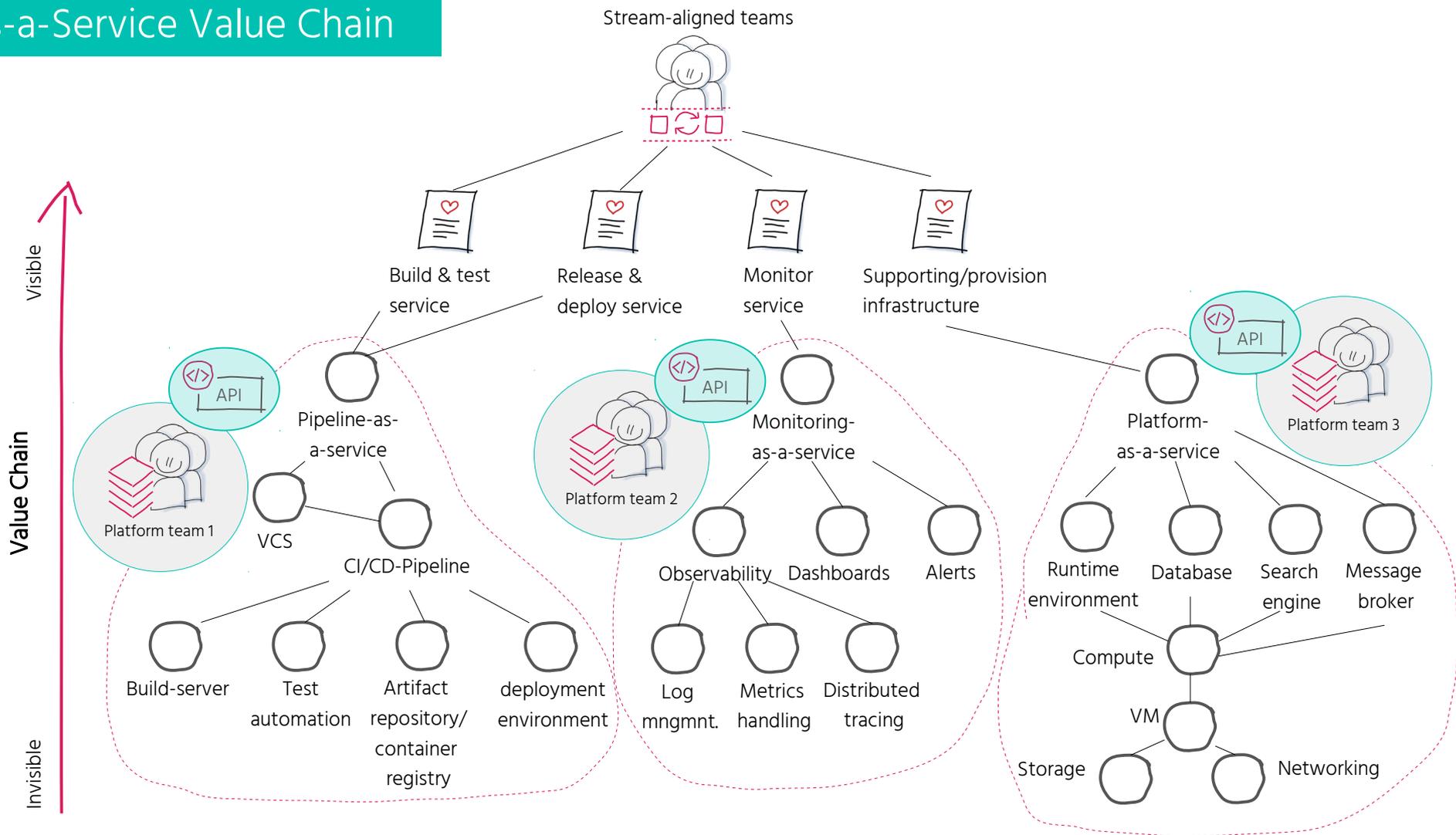
X-as-a-Service Value Chain



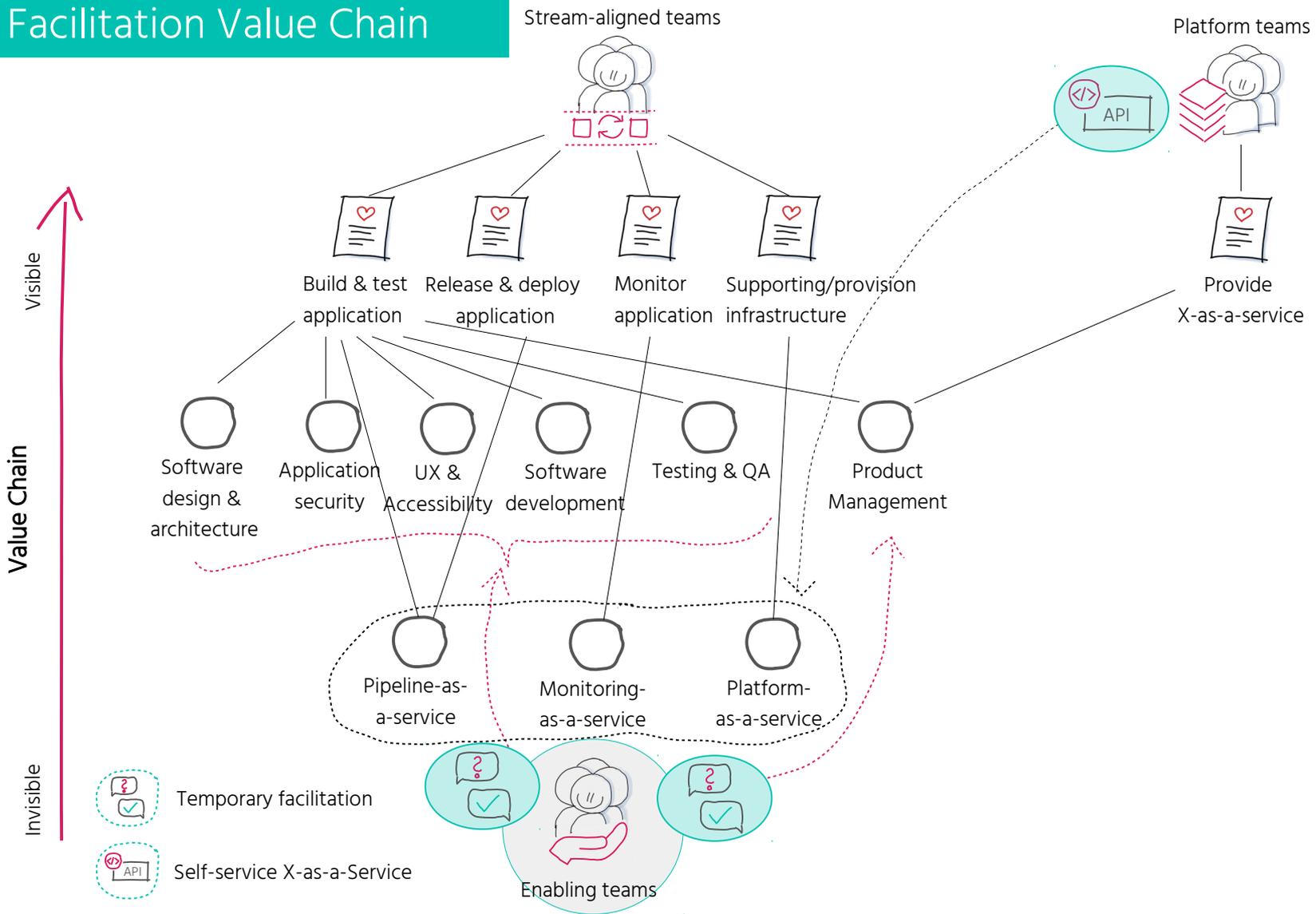
X-as-a-Service Value Chain



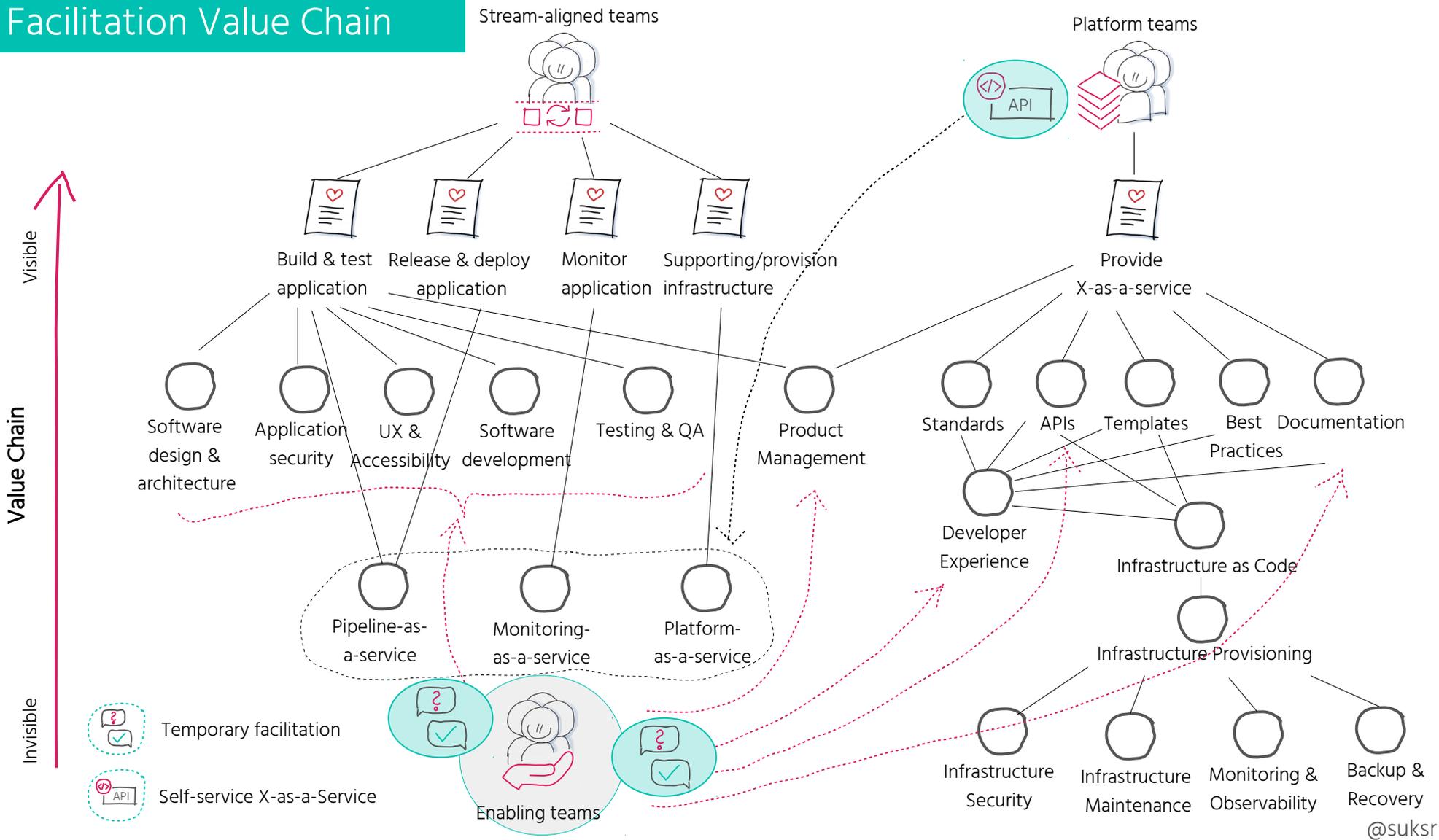
X-as-a-Service Value Chain



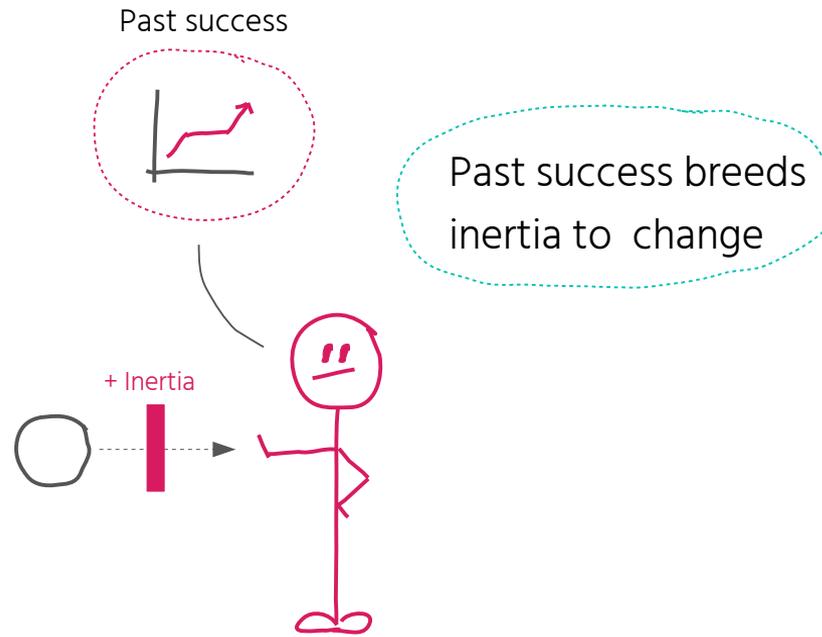
Facilitation Value Chain



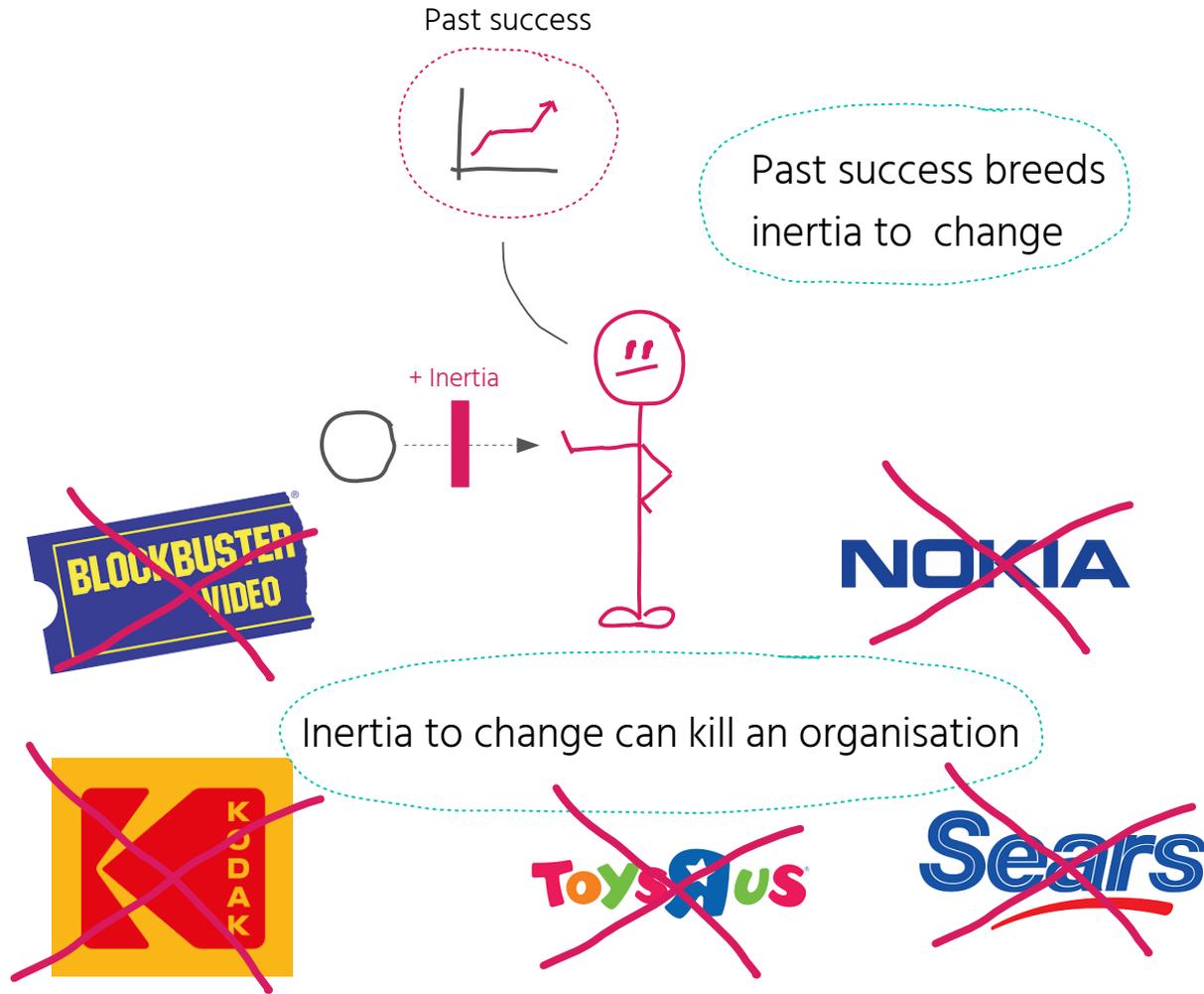
Facilitation Value Chain

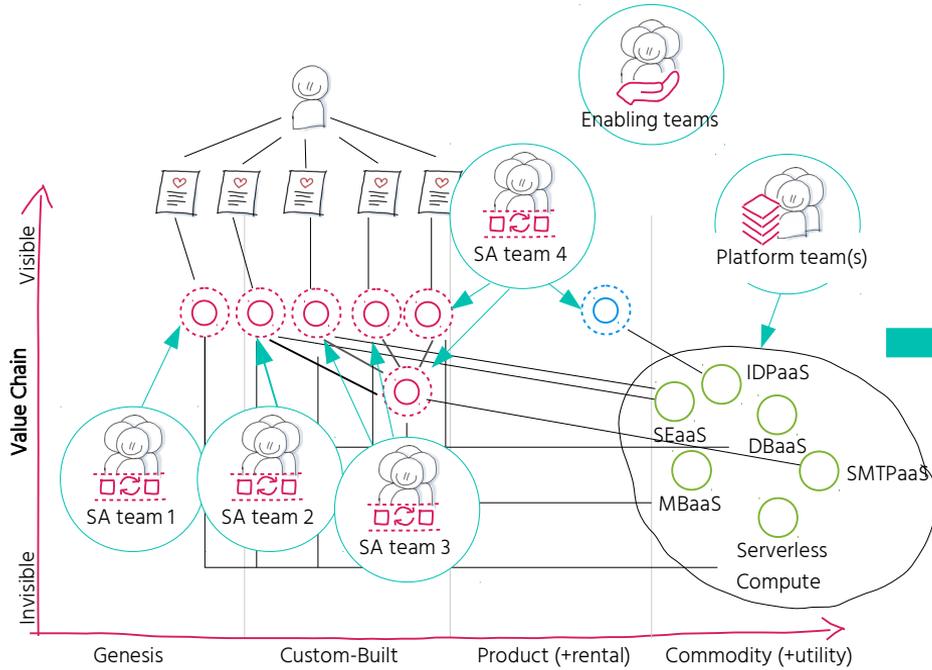


But we are successful, why should we change?

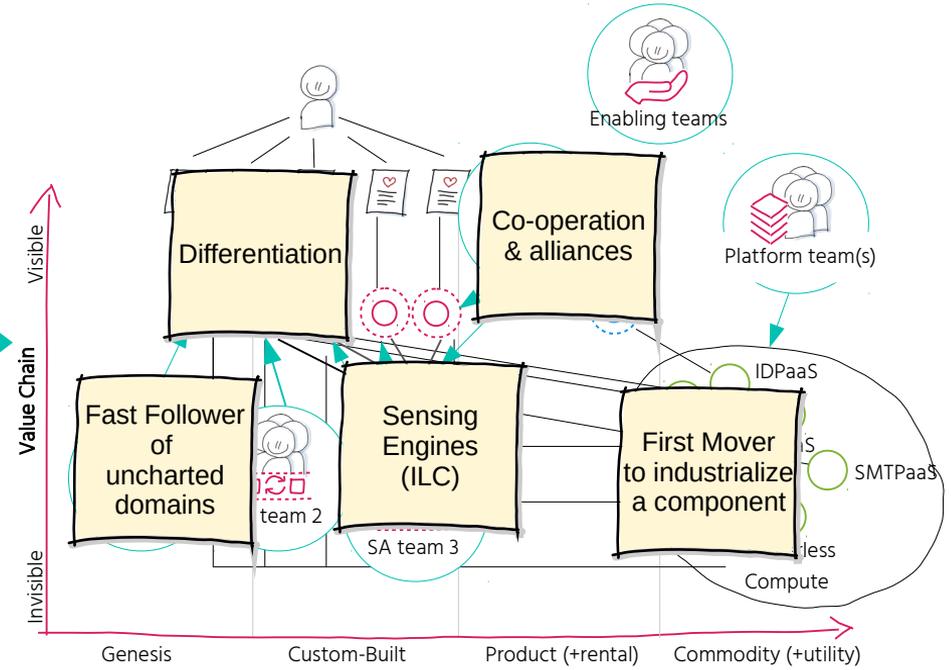


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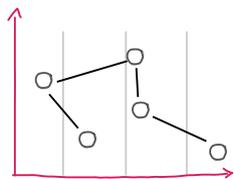


Responsive to Change



Leading future Change

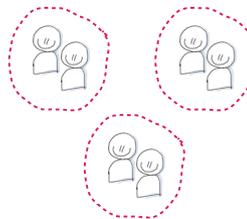
Key Takeaways



Wardley Mapping



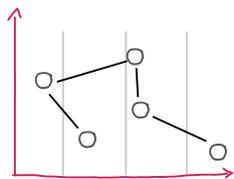
Domain-Driven Design



Team Topologies

- Understanding the landscape an organization is operating & competing in including the external forces acting on the landscape
- Anticipate changes and identifying potential points to invest
- Gaining domain knowledge & discovering the core
- Knowing what components to build, buy/use, or outsource

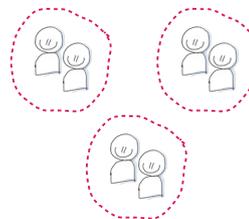
Key Takeaways



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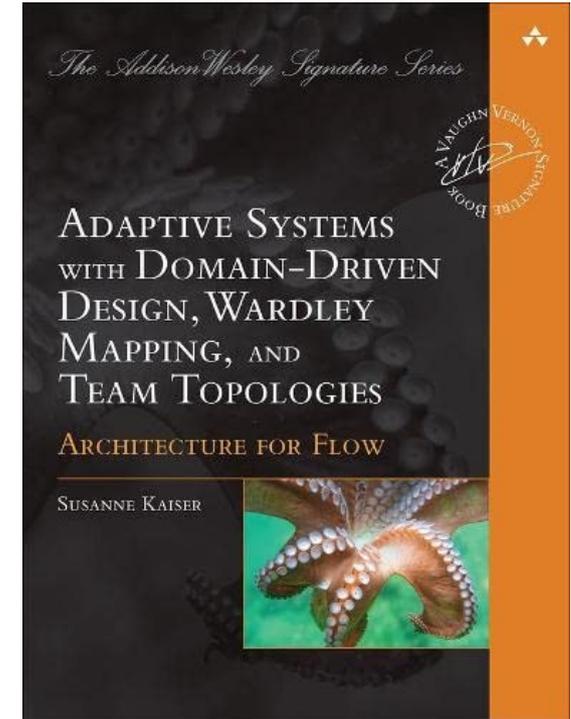
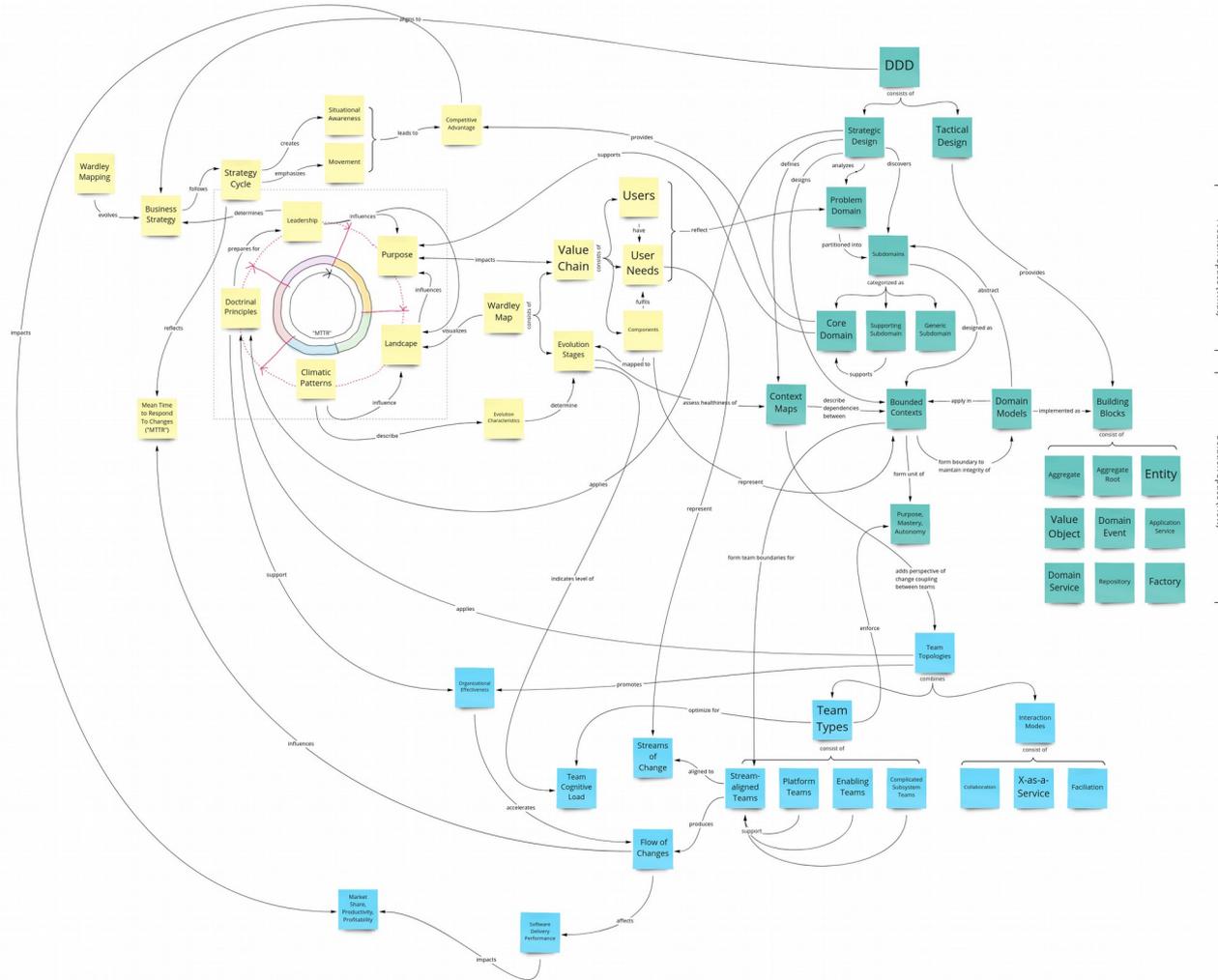
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- Anticipate changes and identifying potential points to invest
- Gaining domain knowledge & discovering the core
- Knowing what components to build, buy/use, or outsource
- Leveraging modularity w/ bounded contexts as well-defined ownership boundaries
- Aligning teams and evolving their interactions to the system we build & the strategy we plan
- Eliminating delivery bottlenecks & increasing software delivery performance
- Optimizing for a fast flow of change to be able to adapt, evolve and thrive in the face of constant change

If you are interested in more details ...



THANK YOU

Susanne Kaiser
Independent Tech Consultant
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