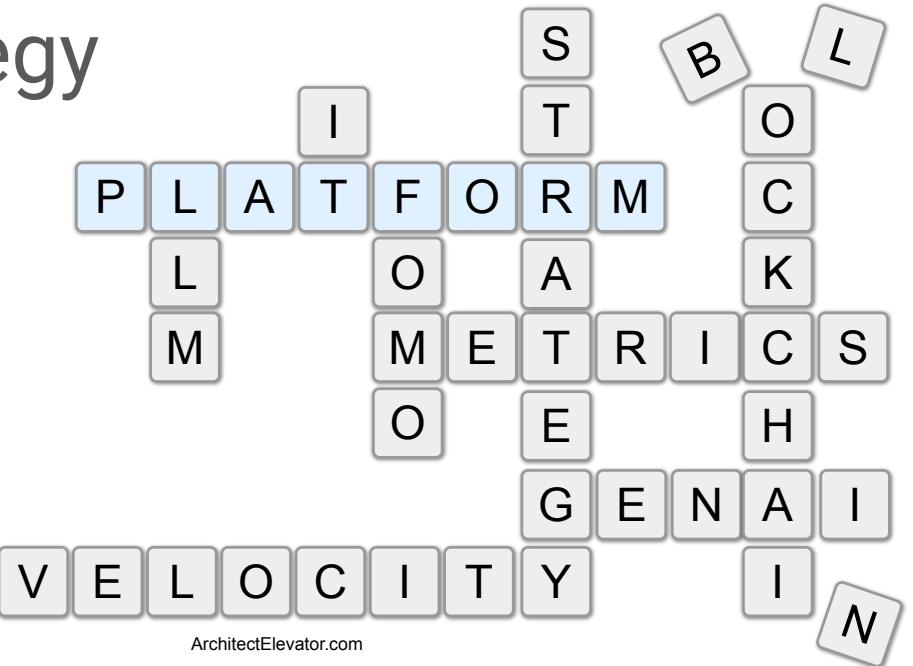


Platforms = Perfectly Portable Productivity Propellants?

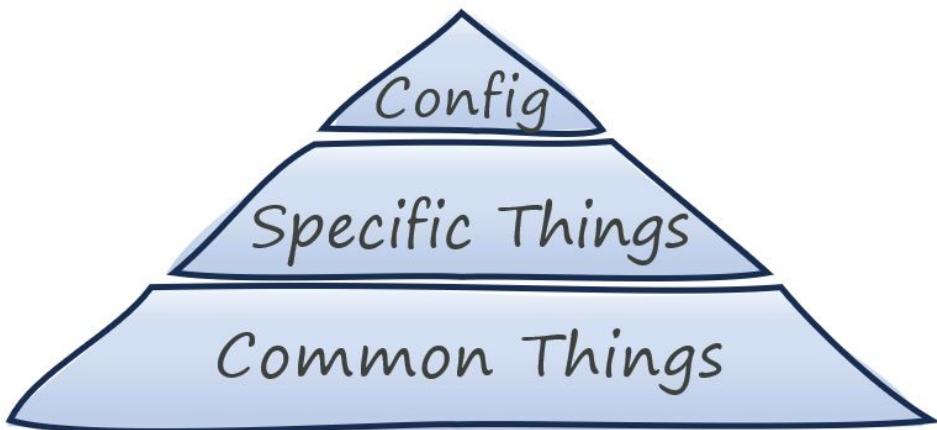
“If I have seen further,
it is because I hit the button.”

Gregor Hohpe
ArchitectElevator.com

IT Strategy

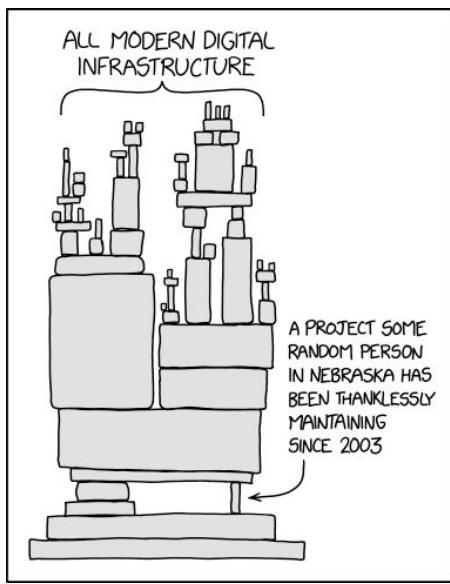


The Approach that Always Saved Us



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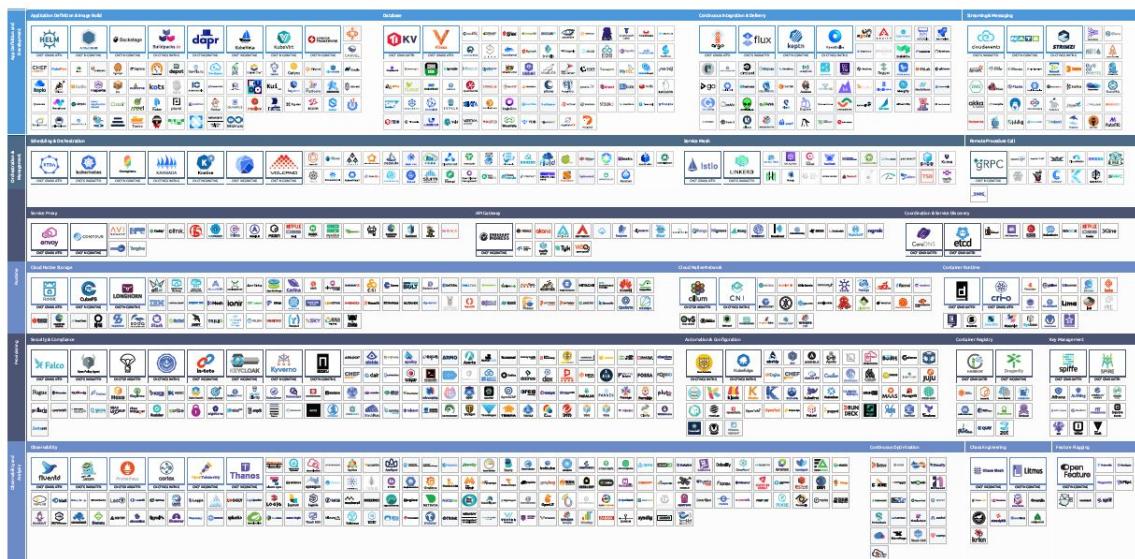
Today's Software Delivery Landscape



<https://xkcd.com/2347>

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Also Today's Software Delivery Landscape



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Dealing with Today's Software Delivery Landscape

Economies of Speed

In-House Platform

Complexity

Economies of Scale

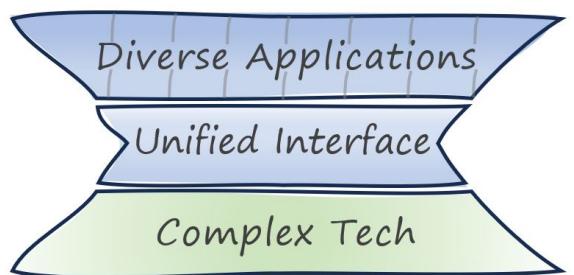
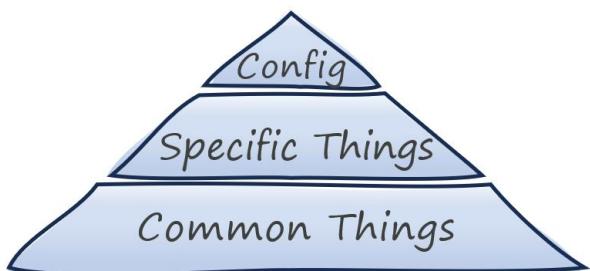
Commercial Cloud Platform

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“Our platform accelerates software delivery by abstracting technical implementation details to reduce the teams’ cognitive load.”

Bingo!

“Platforms don’t try to anticipate every use case.”





"If your users haven't built something that surprises you, chances are that you didn't create a platform."

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More innovation:
model diversity, shorter model cycles

- Lower investment
 - Diverse
 - "Differentiated"
-
- High investment
 - Standardized
 - "Undifferentiated"



"HAT"
LOOK & FEEL

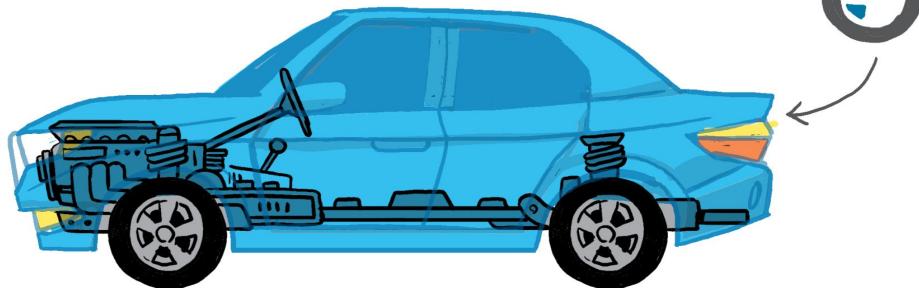


"PLATFORM"
ENGINEERING

More innovation:
better economics for complex technology

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“What’s on top of the platform
is equally important as what’s
beneath.”



Badge engineering is not platform engineering.

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Rather than make things for
you, platforms make it
easier for you to make
things.

“Technology can bring benefits if, and only if, it diminishes a limitation”



Eliyahu Goldratt

A Common Constraint

Harmonization
Cost Reduction



Innovation
Agility

Overcoming Constraints

- | | | |
|-----------------|---|--------------|
| Quality | + | Speed |
| Standardization | + | Innovation |
| Customization | + | Cost |
| Prototyping | + | Scalability |
| Openness | + | Monetization |

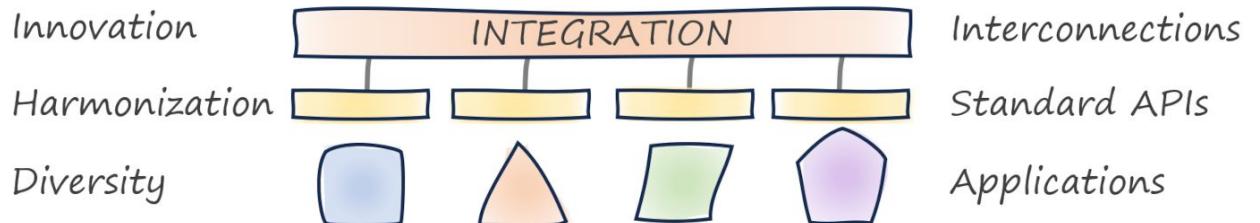
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Standards Enable



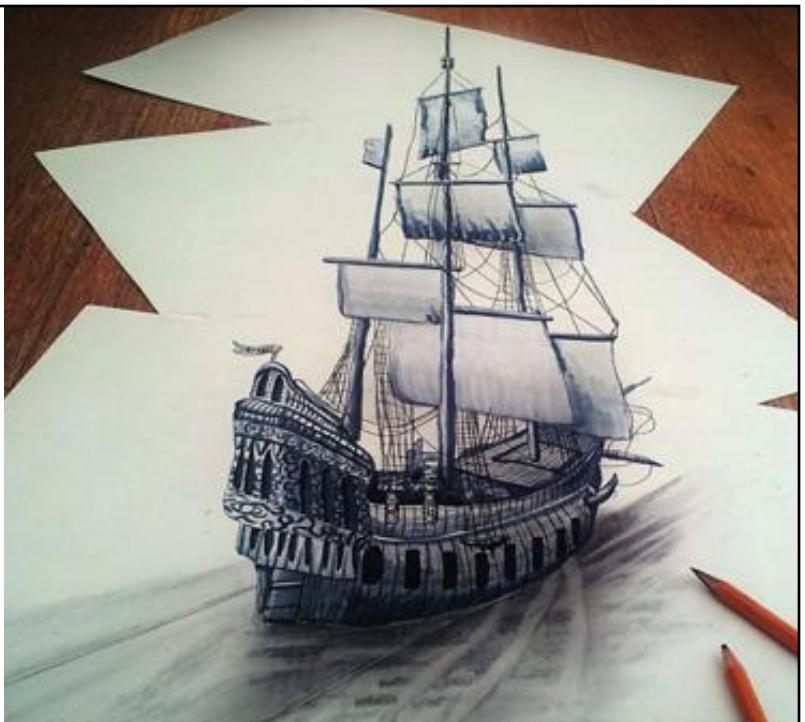
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Standards Drive Innovation



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**“A4 Paper
doesn’t stifle
creativity”**



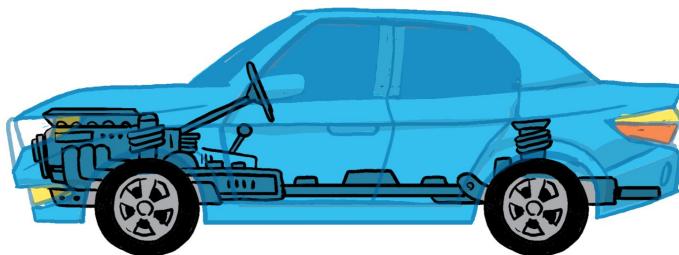
Semantic Diffusion

"When a word is coined with a pretty good definition, but then gets spread through the wider community in a way that weakens or loses that definition - and with it any usefulness to the term.

—Martin Fowler

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If software engineers had named the automobile...



...it'd be called `PistonCrankshaftGearWheelAssembly`

<https://twitter.com/ghohpe/status/1513362076990803969>

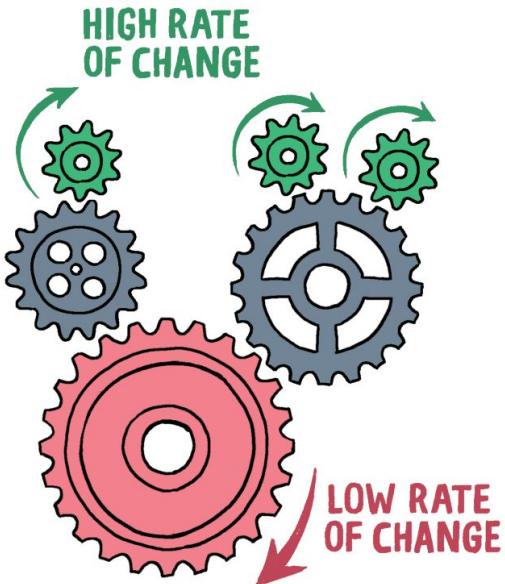
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An abstraction provides a higher-level vocabulary that shields the user from the underlying complexity.

Accelerator, not "Gas Pedal"

“If you need to be familiar with the lower layer vocabulary, it might be a convenience, but it can’t be an abstraction.”



“Platforms harmonize to increase diversity.”

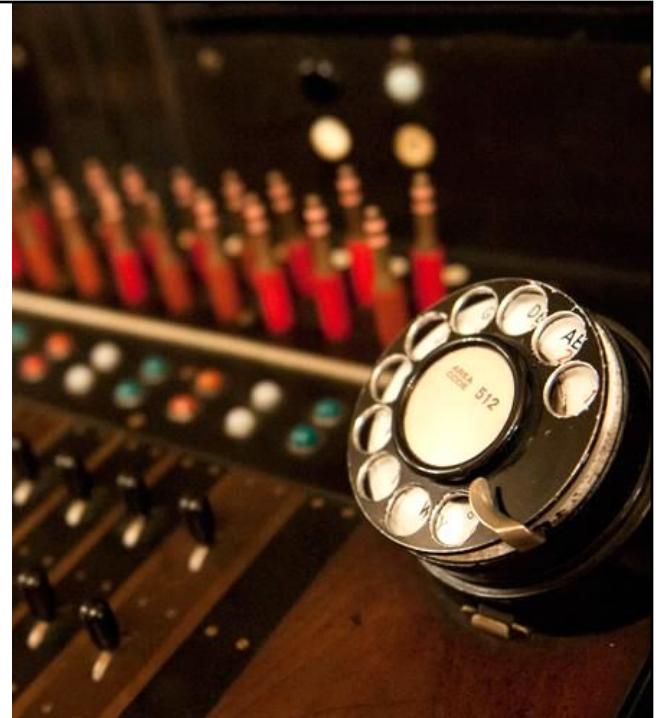
“Platforms enable economies of speed built on economies of scale.”

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Cumbersome APIs
+ GenAI pixie dust
= Happily ever after?

The Magic of Platforms

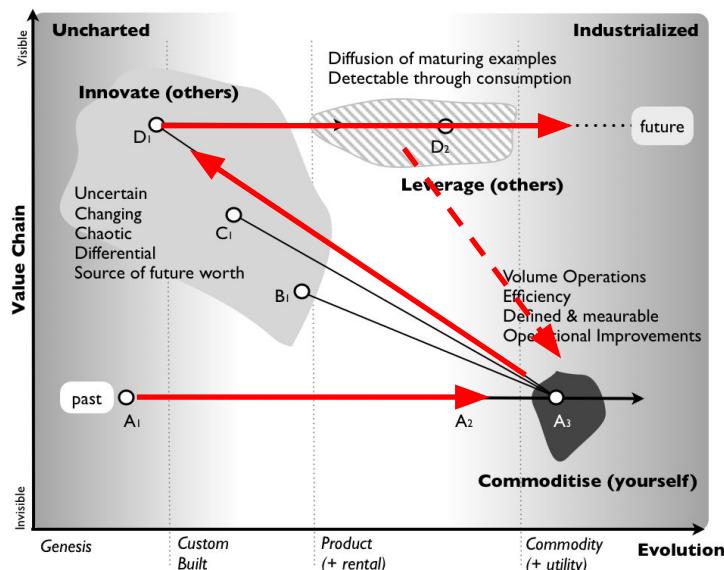
Innovation through
harmonization



“Platforms are a means of centralizing expertise while decentralizing innovation to the customer or user.”

Peter Gillard-Moss, ThoughtWorks

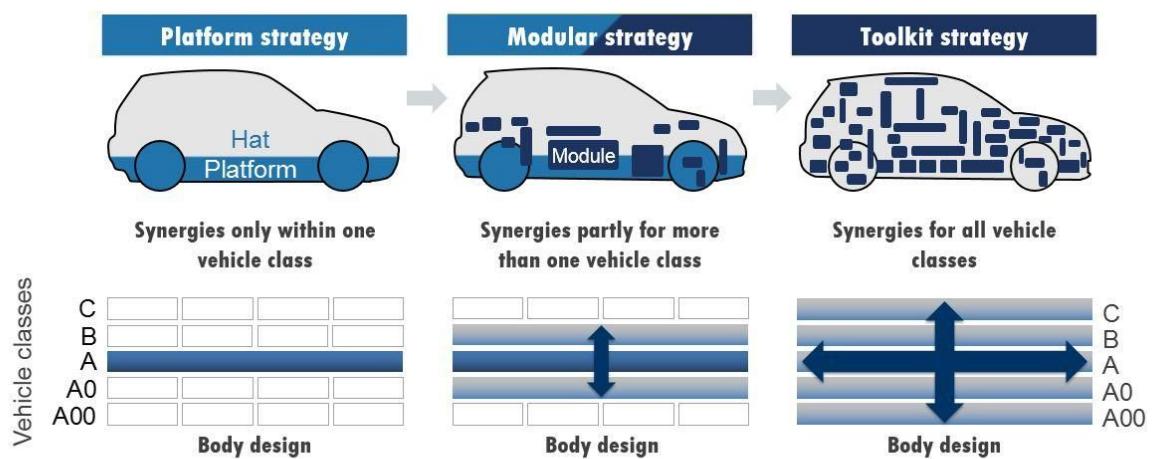
Componentization drives Commoditization drives Innovation



- ILC:**
- Innovate
 - Leverage
 - Commoditize

Source: Simon Wardley

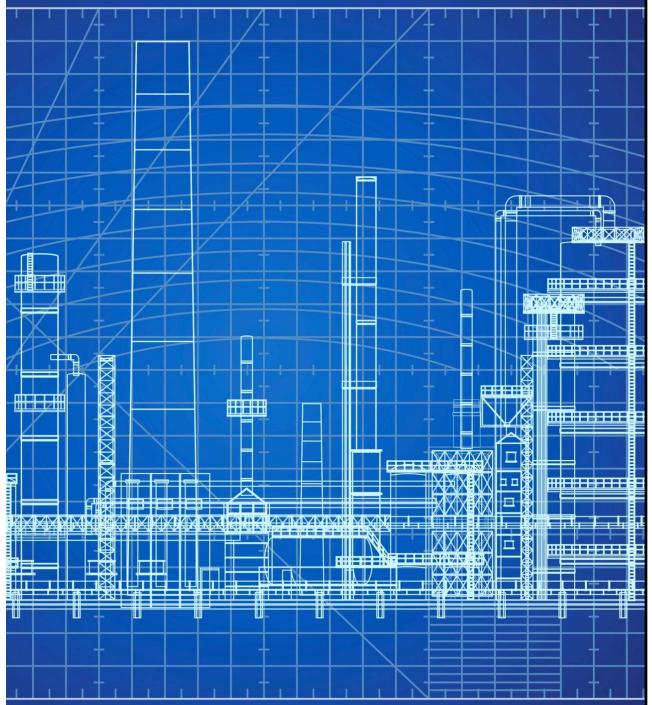
From platform to toolkit (“Baukasten”)



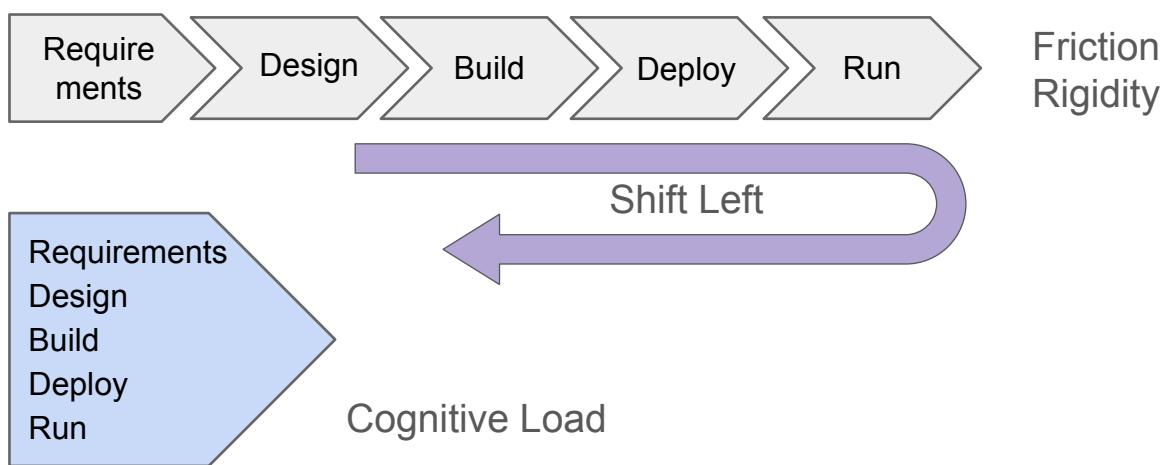
» Volkswagen has developed the modular toolkit strategy based on a platform strategy.

VOLKSWAGEN
GROUP OF AMERICA

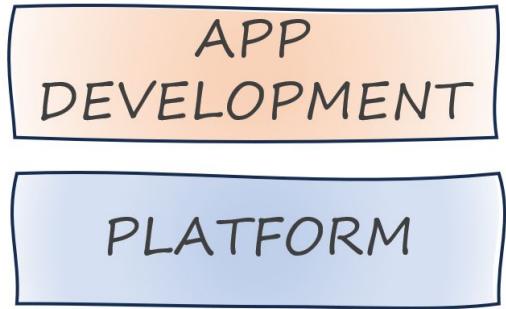
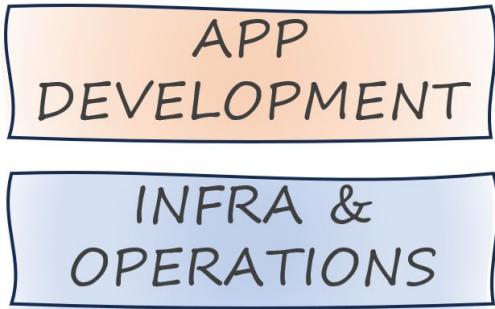
Platform Characteristics



We Shifted Everything So Far Left, It Piled Up

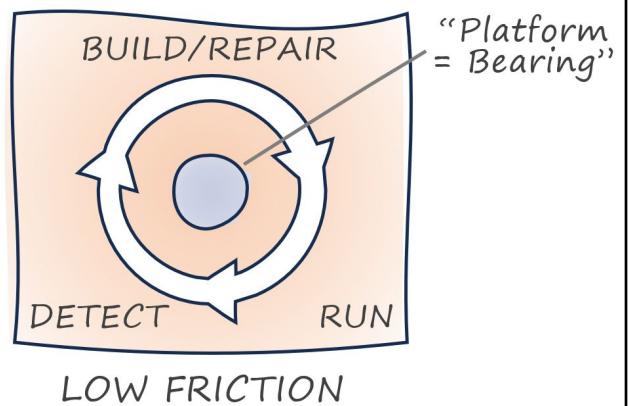
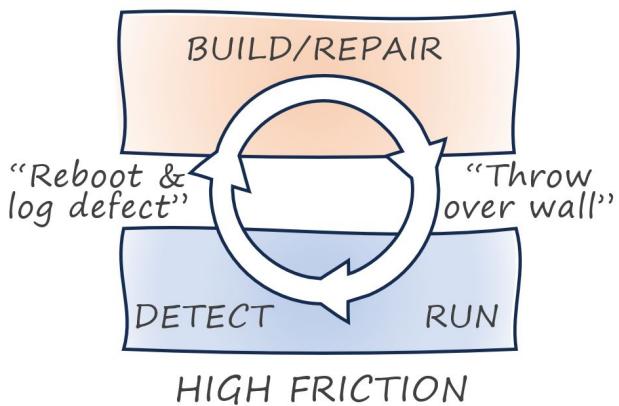


Static models cannot express the difference



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Dynamic models make it clear

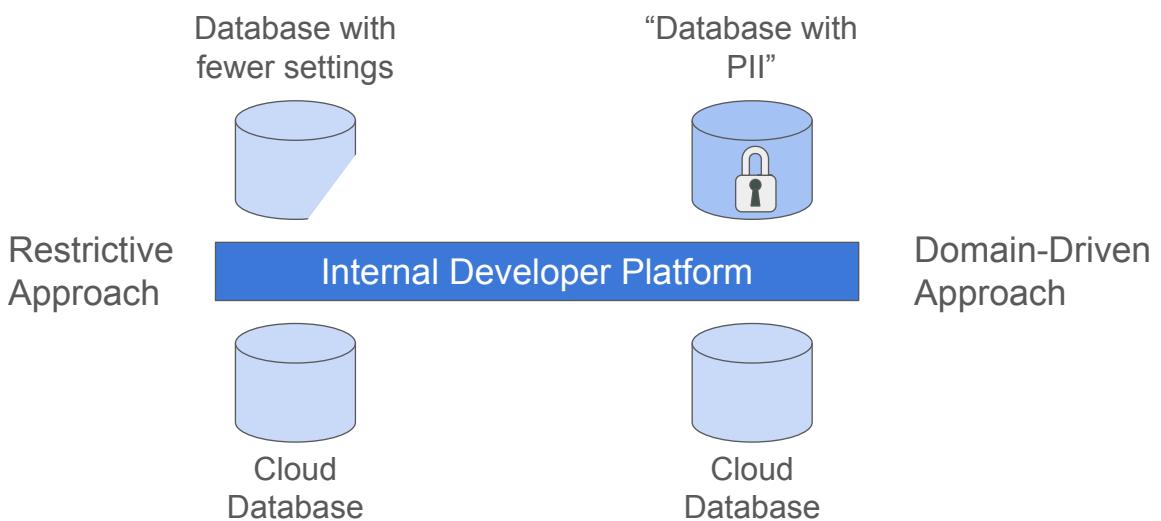


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Characteristic	Platform	IT Service
Scale Effect	Thrives	Bottleneck
Marginal cost	Low	Medium to High
Friction	Low	High
Interaction	Self-Service	Ticket-based
Orientation	Customer-Centric	Process-Centric
Responsibility	Shared	Separated
Evolution	Continuous	Sporadic
Extensibility	Open / semi-open	Closed
(Adoption)	Voluntary	Mandated

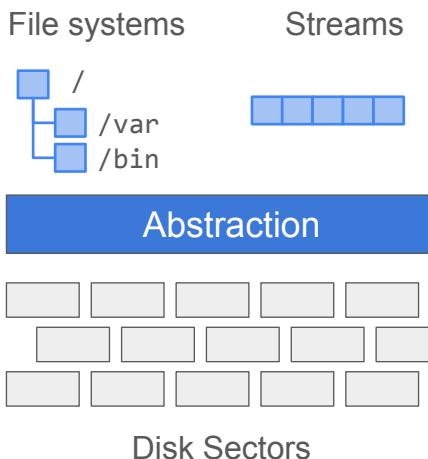
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Successful Platforms Model a Business-Tech Domain



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Operating Systems Abstract



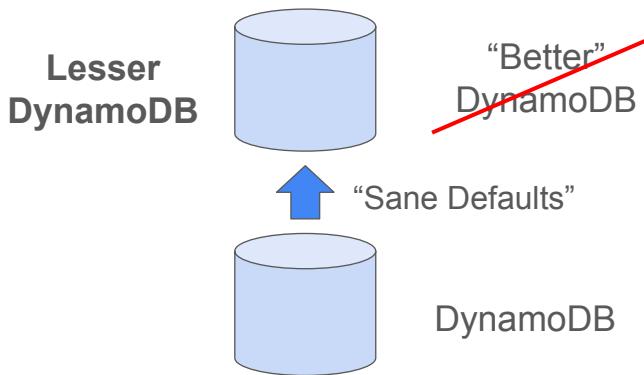
“Operating systems did not reduce cognitive load by fixing the drive letter.”

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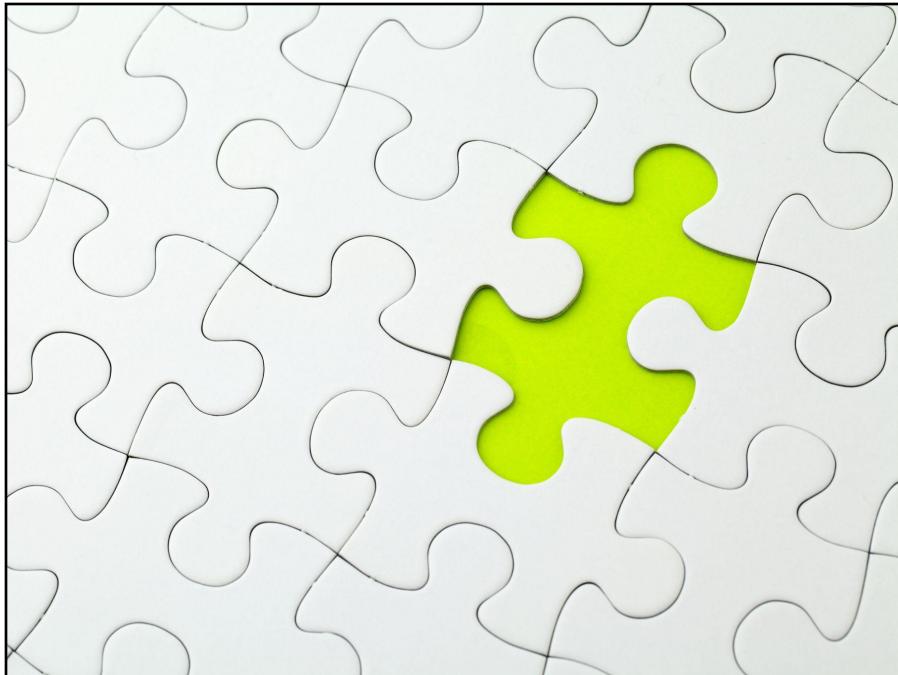


“A successful platform must make developers’ lives easier now, not at some point in the distant future.”

No one wants a 80% DynamoDB



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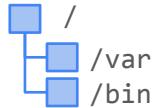


Taking 100
pieces away
from a 1000-
piece jigsaw
puzzle does
not make
things easier!

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Operating Systems Abstract

File systems



Streams



Abstraction



Disk Sectors

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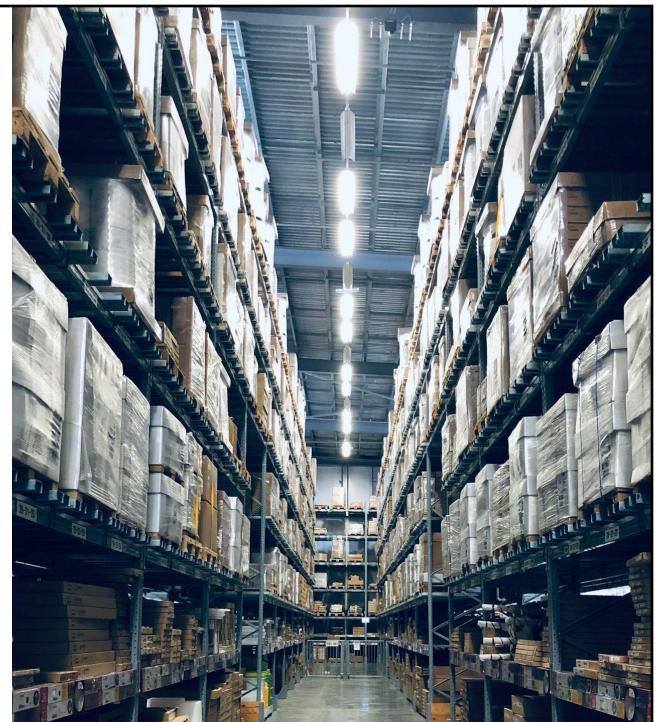
“Operating systems did not reduce cognitive load by fixing the drive letter.”

Instead, they defined entirely new abstractions.

“Look for services that the cloud provider fundamentally cannot deliver.”

“If you don’t understand your business-technical domain, your platform is unlikely to deliver the promised results.”

**Platform Teams
Are Wholesale
Customers**

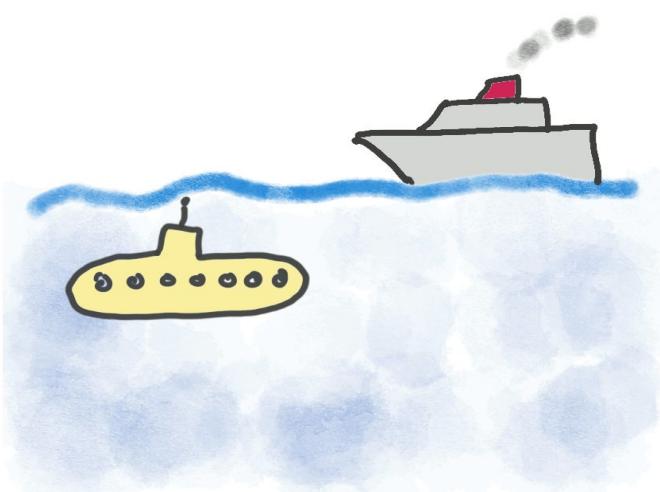


Fruit Salad or Fruit Basket



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Building a Platform: Floating or Sinking



SUBMERGED

FLOATING

“Everyone wants to float until they realize their cost is sunk.”

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The new life of an IT decision maker

Architect Elevator



The IT Engine Room is no longer a black box:

The technology decisions you make today define your organization's future success.

Uncertainty



Optimizing for change instead of the steady state:

As you won't be able to predict everything, you must be better prepared to be wrong.

IT as innovation driver



Business and IT Strategy are a two-way road:

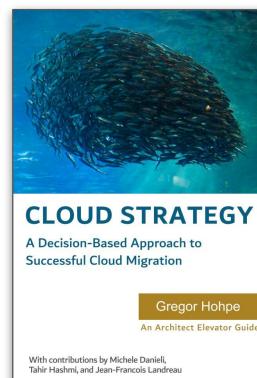
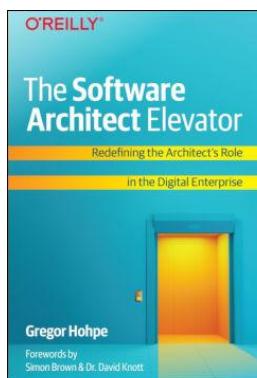
Technical capabilities drive business opportunities.

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Gregor Hohpe - Engineer, Architect, Author



Gregor loves riding the *Architect Elevator* from the engine room to the penthouse, perhaps automating distributed systems in the morning and preparing a board presentation in the afternoon. He helps technology leaders derive the most value from modern technology and software delivery approaches.



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