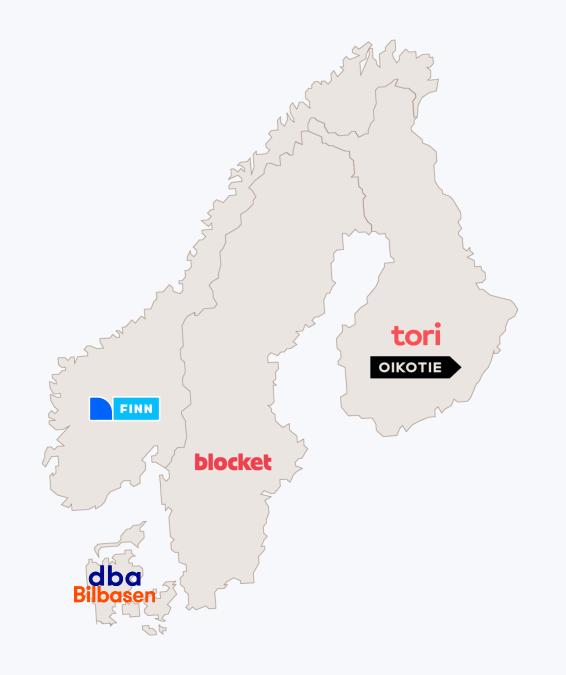




Fryktløs endringsreise?

Konsolidering Vertikalisering Platformisering Konsolidering
Vertikalisering
Platformisering













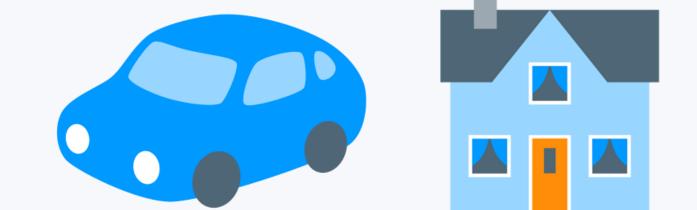






















































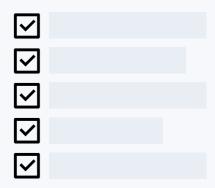


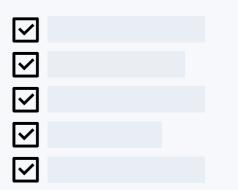








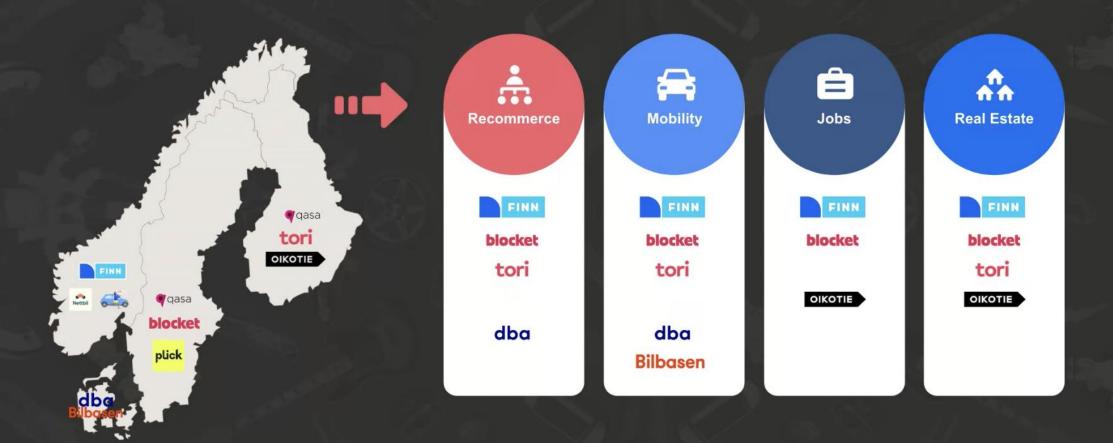


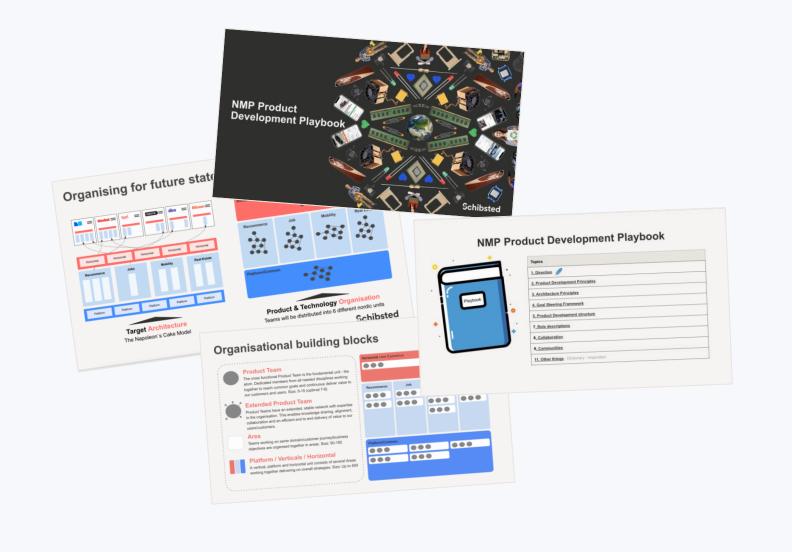




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Verticals, not countries





Conway's law

In 1967, computer scientist Mel Conway wrote an article whose thesis became known as Conway's Law. "Organizations which design systems are constrained to produce designs which are copies of the communication structures of those organizations."

A sort of "revival" of Conway's law took place around 2015, when microservices architectures were on the rise. In particular, James Lewis, Technical Director at Thoughtworks,

Team structures must match the required software architecture or risk producing unintended designs.

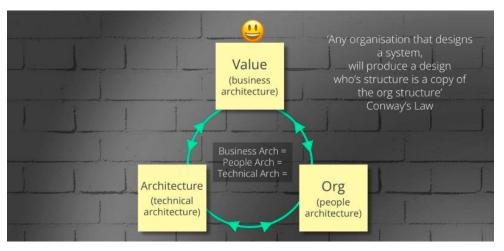
and others came up with the idea of applying an "inverse Conway maneuver" (or reverse Conway maneuver), whereby an organization focuses on organizing team structures to match the architecture they want the system to exhibit rather than expecting teams to follow a mandated architecture design.¹⁰

Conway's law

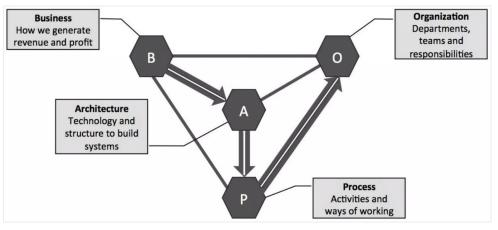
Conway's Law asserts that organizations are constrained to produce application designs which are copies of their communication structures. This often leads to unintended friction points.

Inverse Conway Maneuver

The 'Inverse Conway Maneuver' recommends evolving your team and organizational structure to promote your desired architecture. Ideally your technology architecture will display isomorphism with your business architecture.



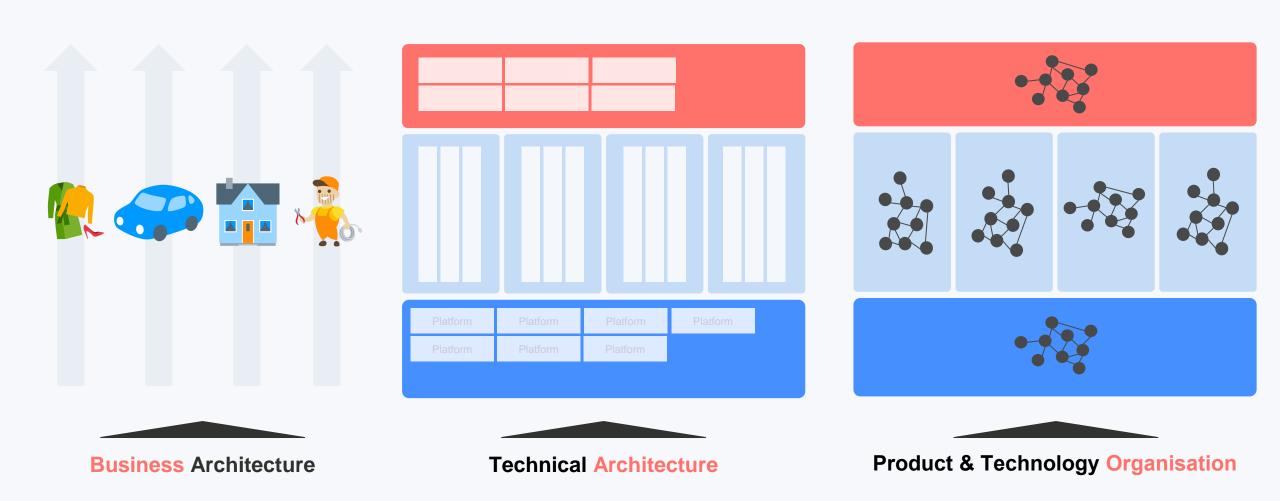
Antipattern: org design without consideration of the flow of value or the technical architecture. Sooner Safer Happier: Antipatterns and Patterns for Business Agility by Jonathan Smart



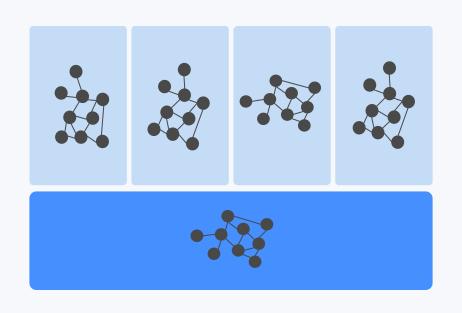
Structure Eats Strategy BAPO model: Jan Bosh



Verdi + Arkitektur + Organisasjon

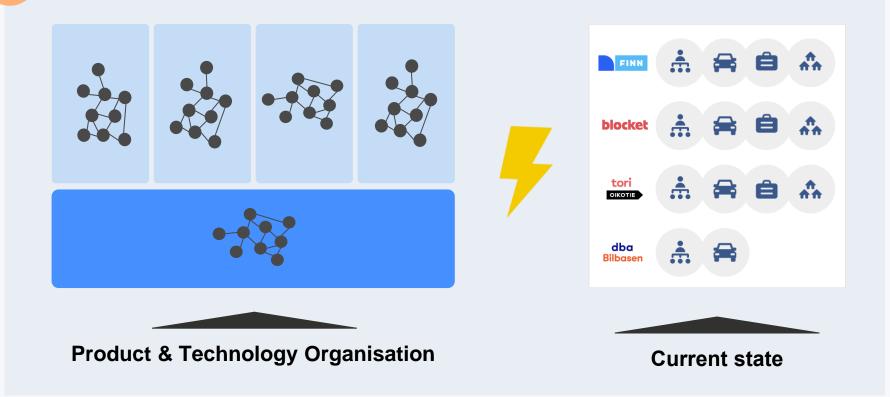




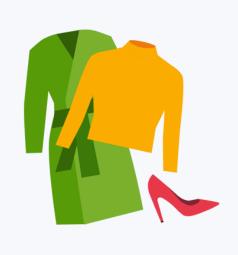








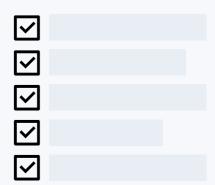




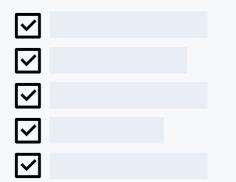












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Verticals,

tailored to our users jobs-to-be-done, independent of each other.

Platform (as a Product),

Anything generic that helps accelerate development, configurable, optional and self-served

Team Topologies

Key concepts

FOUR FUNDAMENTAL TOPOLOGIES

Organizations developing and running non-trivial software systems today need to optimize their teams for a anta and rapid flarer of ahanga atrangler informed her have

- Stream-aligned team: aligned to a flow of work from (usually) a segment of the business domain
- Enabling team: helps a Stream-all obstacles. Also detects missing ca
- Complicated Subsystem team: w mathematics/calculation/technical
- Platform team: a grouping of othe compelling internal product to acce Stream-aligned teams

THREE TEAM INTERACTION M

- Collaboration: working together fc discover new things (APIs, practice
- X-as-a-Service: one team provide: something "as a Service"
- Facilitation: one team helps and n

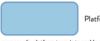
Team Topologies

Four fundamental team topologies



A "stream" is the continuous flow of work aligned to a business domain or organizational capability. Continue flow requires clarity of purpose and responsibility so t multiple teams can coexist, each with their own flow

A stream-aligned team is a team aligned to a sing valuable stream of work; this might be a single product service, a single set of features, a single user journey, a single user persona. Further, the team is empowered build and deliver customer or user value as quickly, safe and independently as possible, without requiring hand-o to other teams to perform parts of the work.



Platform team

The purpose of a platform team is to enable stream-align teams to deliver work with substantial autonomy. T stream-aligned team maintains full ownership of buildir running, and fixing their application in production. T platform team provides internal services to reduce t cognitive load that would be required from stream-align teams to develop these underlying services.

Team Topologies Interaction modes

Three Interaction Modes



Collaboration



X-as-a-Service



Enabling team



Collaboration mode

Advantages	Disadvantages
d innovation and discovery er hand-offs	Wide, shared responsibility for each team More detail/context needed between teams, leading to higher cognitive load Possible reduced output during collaboration compared to before

Complicated-

subsystem team

Constraint: A team should use collaboration m at a time. A team should not use collaboration same time.

Typical Uses: Stream-aligned teams working with complicated-subsystem teams; stream-aligned teams working with platform teams; complicated-subsystem teams working with platform teams

X-as-a-Service

n with more than one team at the	Typical Heart Stream aligned teams	
node with, at most, one other team	Constraint: A team should expect to many other teams simultaneously, when	
collaboration compared to before		
ossible reduced output during	is limited	
ognitive load	between teams, so cognitive load	boundary or API is not effective
etween teams, leading to higher	, , , , , , , , , , , , , , , , , , , ,	
fore detail/context needed	Reduced detail/context needed	Danger of reduced flow if the
each team	responsibility boundaries	or API
ride, shared responsibility for	 Clarity of ownership with clear 	Slower innovation of the boundary

Advantages

suming Platform-as-a-Service from a platform team; stream-aligned teams and complicated-subsystem teams consuming a component or library as a service from a complicated-subsystem team

Disadvantages

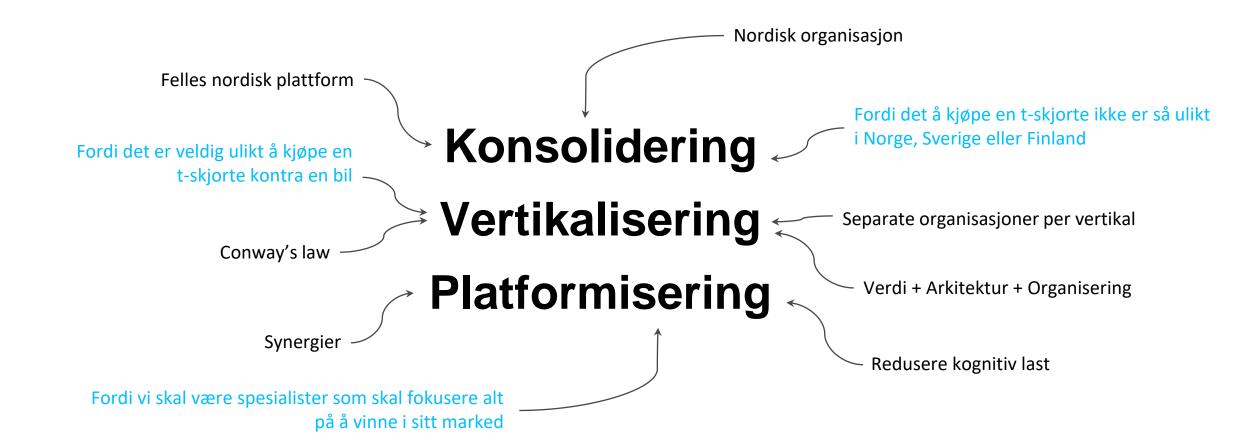
Advantages	Disadvantages
Unblocking of stream-aligned teams to increase flow Detection of gaps and misaligned capabilities or features in components and platforms	Requires experienced staff to not work on "building" or "running" things The interaction may be unfamiliar or strange to one or both teams involved in facilitation
	I se the facilitating interaction mode with neously, whether consuming or providing

Facilitating mode











Takk for meg!

Jostein Emmerhoff Schibsted Nordic Marketplaces









