



**DIGITAL
ARCHITECTURE
DESIGN
DAY 2023**

BEST OF BOTH WORLDS

AGILE AND ENTERPRISE ARCHITECTURE?

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 - PhD Bedrijfskunde, Informatie Management; Universiteit Tilburg, 2008
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Philip Kroon

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 - Nu: IT Consultancy, hoofdzakelijk gefocust op bedrijfstransformaties en IT M&A trajecten
 - Daarnaast: Deloitte Impact Foundation Initiative Owner, Generative AI CoE owner, SAFe trainer
- Achtergrond in zowel IT als economie
 - BSc Economics; Universiteit Utrecht
 - MSc Business Information Management; Rotterdam School of Management
- Expertise- en interessegebieden
 - Agile methoden, Bedrijfstransformatie, Business, Data & Informatie Management, IT Governance, IT M&A



Inleiding

- Veel organisaties zitten in de transformatie naar Agile of maken er al gebruik van
 - Ontstaan vanuit softwareontwikkeling
 - Steeds meer andere toepassingen
- Trend van organisatiebreed toepassen Agile
 - Verwachtingen zijn hoog
 - Hoe haal je het maximale eruit?

Organisatiebreed invoeren Agile

Het omarmen van grootschalige toepassing van Agile raamwerken (Agile Scaling Frameworks, ASFs) in de gehele organisatie

- Architectuurontwerp “emerging architecture” als onderdeel van een Agile aanpak is *effectief op projectniveau*
- Uitdaging wanneer diensten naadloos moeten samenwerken op organisatie- en ketenniveau

Teams vs. Organisatie



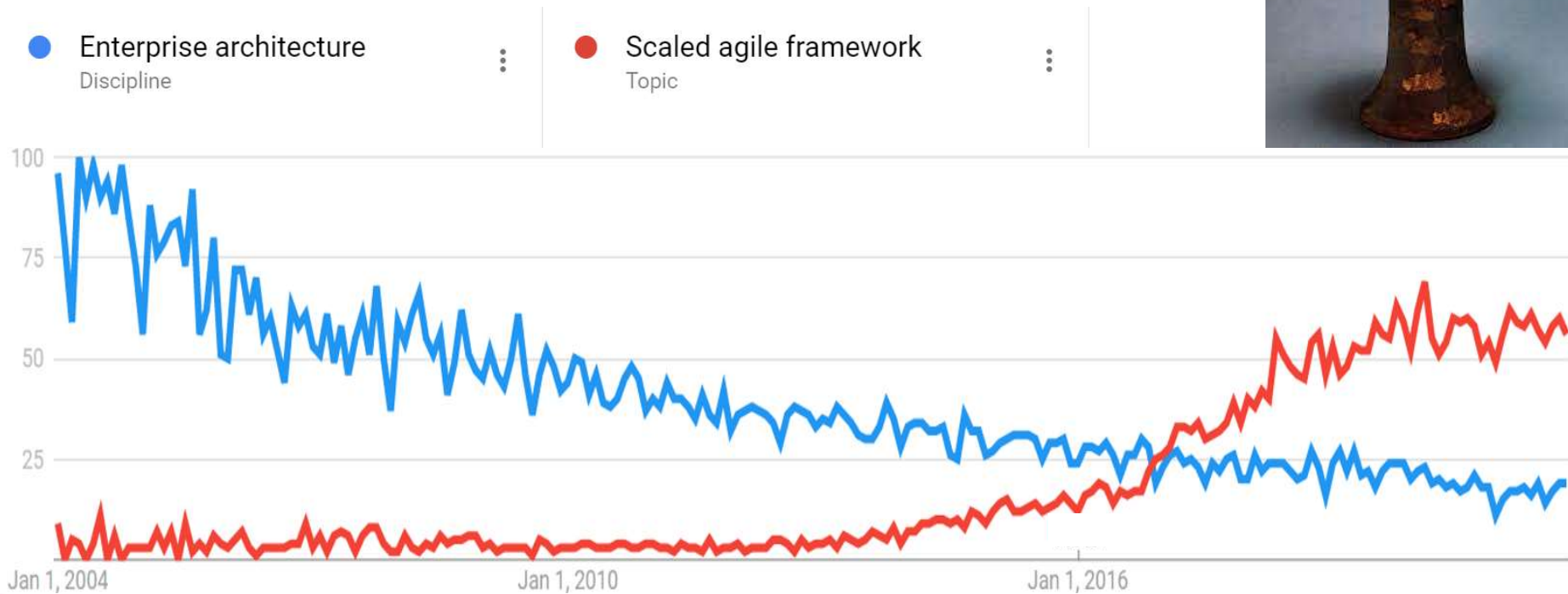
Team Level

Enterprise Level



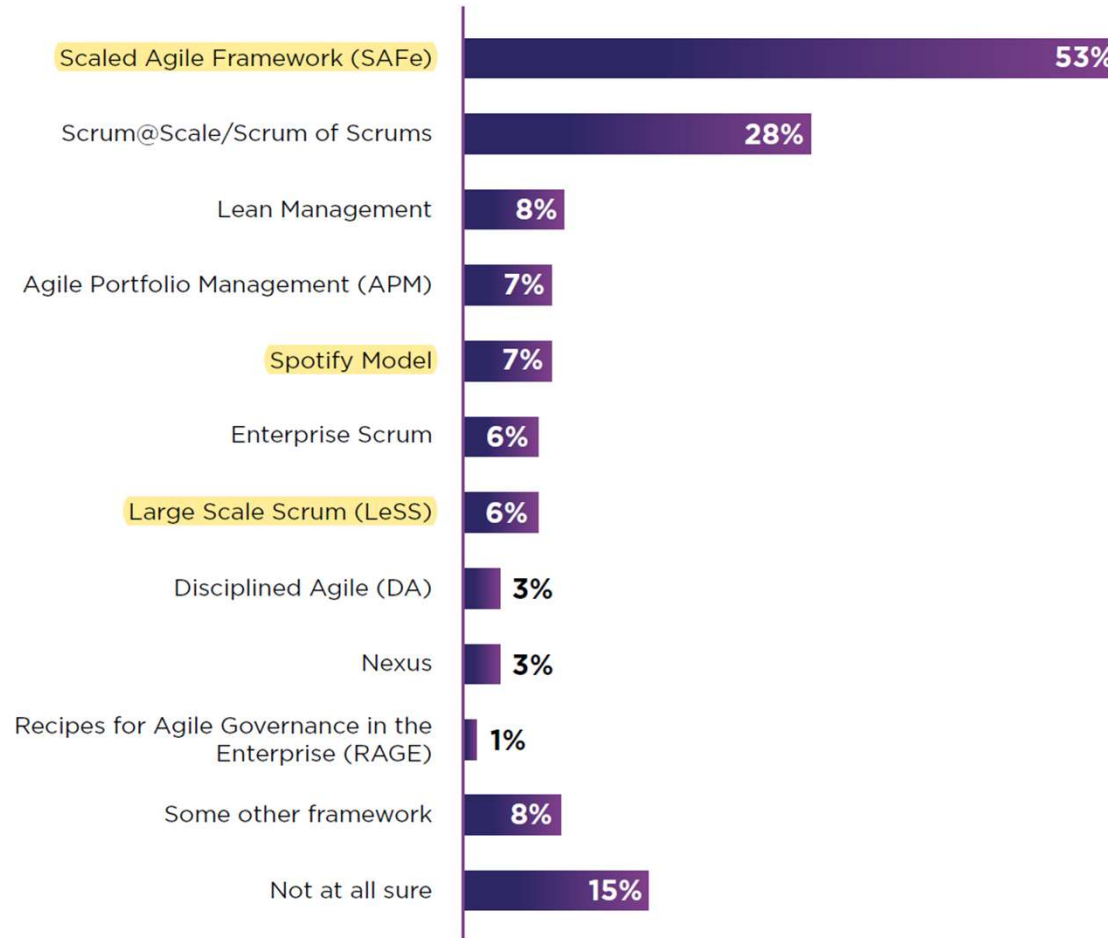
Popularity of EA vs. Scaled Agile Framework

“The best architectures, requirements and designs emerge from self-organizing teams.” (Agile Manifesto, principle 11)



[Enterprise architecture, Scaled agile framework - Explore - Google Trends](#)

State of Agile Report 2022



<https://digital.ai/resource-center/analyst-reports/state-of-agile-report/>
(3220 respondents)

Key characteristics of Agile Scaling Frameworks



Framework	SAFe	LeSS	Spotify model
Publication date	2011	2016	2012
Country of origin	USA	Finland	Sweden
EA addressed	Yes	No	No
Team composition	Various architecture roles and separate Scrum teams	Classical Scrum composition (Product owner, Scrum Master, and feature team)	"Tribes" consisting of "Squads" and "Chapters" "Guilds" consisting of cross-Tribe specialists
Number of configurations	4	2	1

Stakeholders Agile Context



Agile vs. Enterprise Architecture



Agile

Enterprise Architecture



Agile Teams vs. Architects



Agile Teams

Vs.



Enterprise Architects

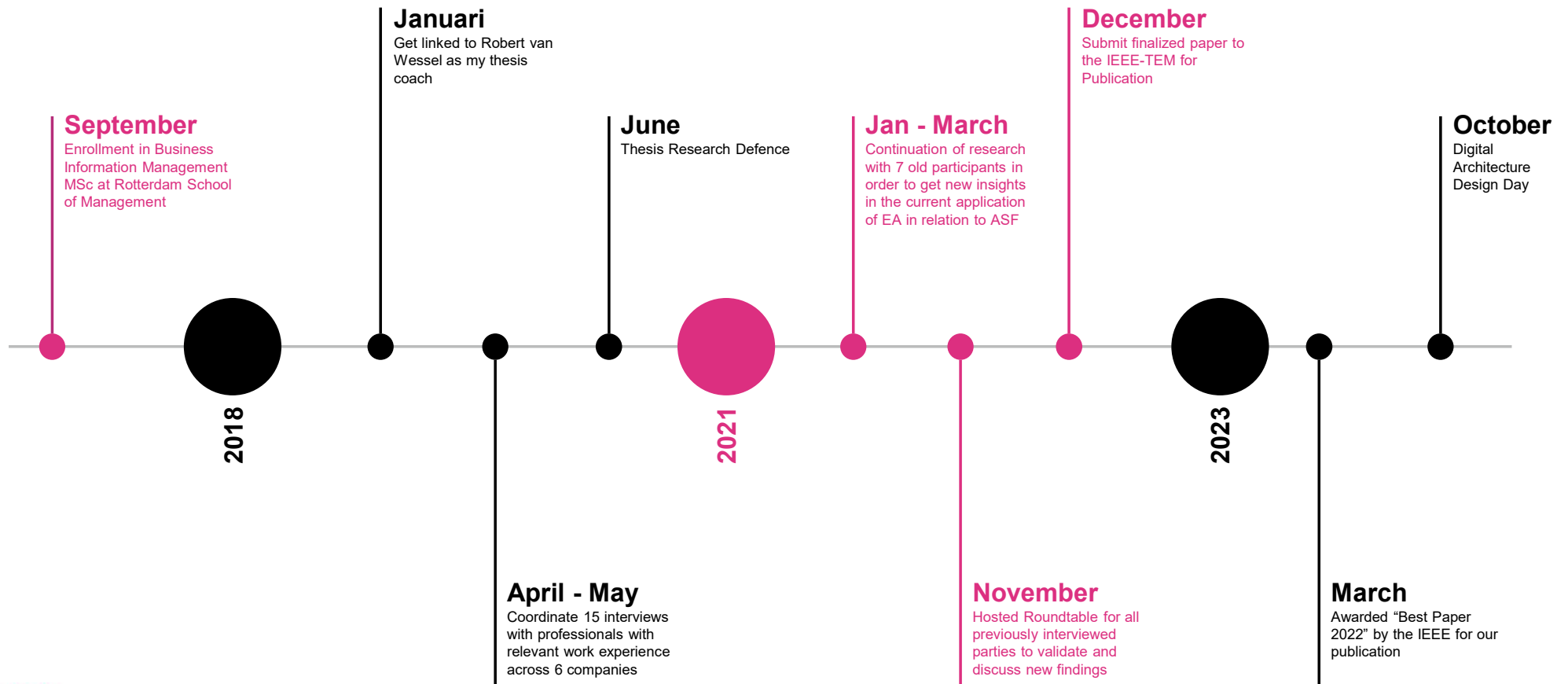


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THE RESEARCH

5 YEARS IN THE MAKING

Tijdslijn van het Onderzoek



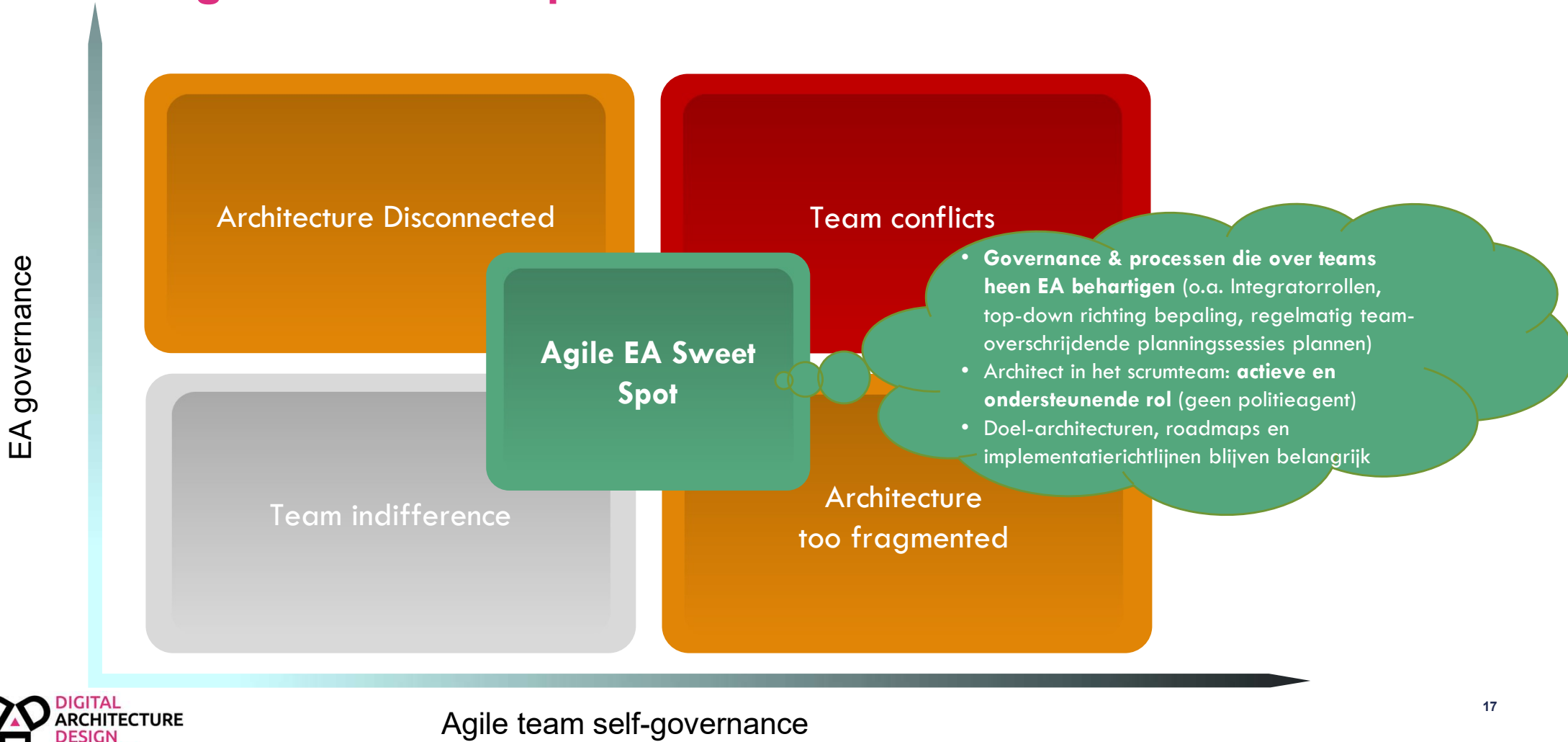
Case Companies within the Service Sector

Company	ASF (t=1)	ASF (t=2)	Industry	Size	Reason for implementation	Transformation
A	SAFe	SAFe + Spotify	Telecom	Large	De-risking large programs; staying competitive	Stepwise approach
B	LeSS	LeSS + Spotify & SAFe	Financial Services	Large	Aligning departments in the organization; increasing agility	Stepwise approach
C	Spotify	Spotify + SAFe elements	Financial Services	Large	Reducing time-to-market and overall costs	Big Bang approach

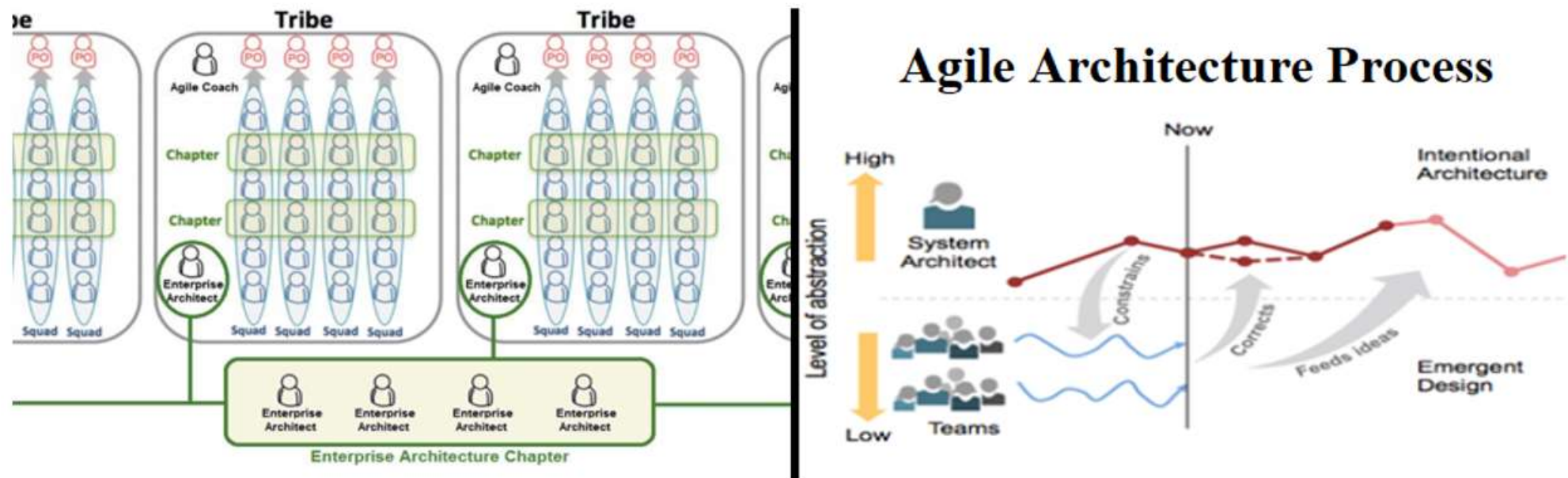
Longitudinal case study on Agile Scaling Frameworks (van Wessel et al., IEEE-TEM, 2022)

	I: April and May 2018 Transformation phase	II: January 2021 – March 2021 Application phase
Company A	<ul style="list-style-type: none"> X Agile transformation hampered by sticking to existing EA practices (TOGAF) X Difficulties in positioning enterprise architects within scaled Agile context 	<ul style="list-style-type: none"> ✓ At portfolio level, Quarterly Business Reviews (QBRs) are an effective governance mechanism, where priorities across all domains are determined every quarter ✓ The organization expects architects to play a supporting role in tribes and Program Increment events
Company B	<ul style="list-style-type: none"> X Significant staff reductions, including in architecture governance layers X Architects struggling to ensure alignment across the new agile teams 	<ul style="list-style-type: none"> ✓ Communication between tribes improved with the introduction of QBRs ✓ Dependencies are better managed: architects identify dependencies and provide suggestions for alignment
Company C	<ul style="list-style-type: none"> X The role of architecture not addressed in ASF, so EA was neglected company wide X Difficulties redefining the shape of EA needed 	<ul style="list-style-type: none"> ✓ Improved turnaround times and anticipation of new insights, resulting in prioritizing business features and stepwise delivery of business functionalities X Agile mindset not internalized due to lack of attention to cultural change

The Agile EA Sweet Spot

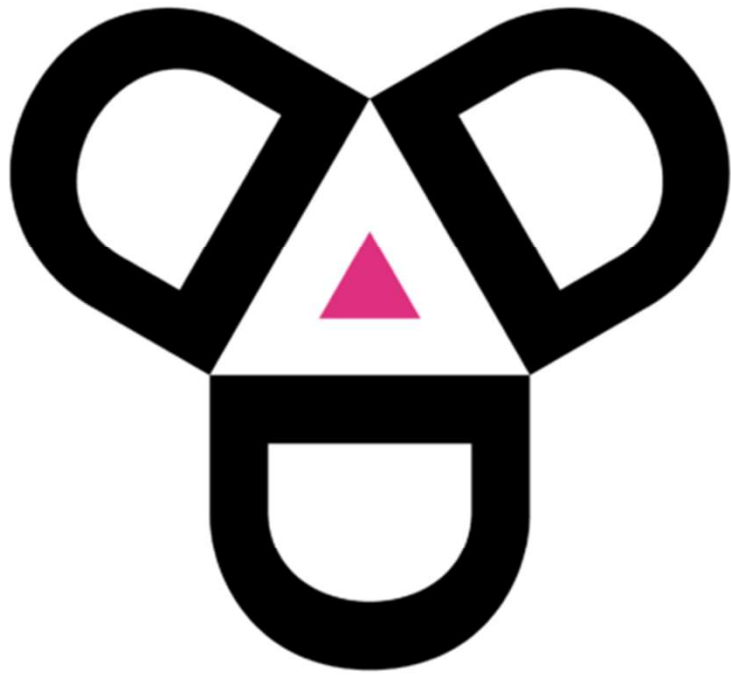


Agile Architecture gefaciliteerd door Hybride ASF aanpak



Belangrijkste succesfactoren voor het toepassen van EA en Agile organisatiebreed

1. Bepaal voor- en nadelen van een ASF en stem deze af op de organisatiebehoeften; combineer indien nodig ASF versies
2. Herdefinieer EA en bijbehorende rollen en processen voorafgaand aan transformatie
3. Behoud enkele traditionele waterval-elementen van EA
4. Faciliteer team-overschrijdende EA-coördinatie en balanceer daarmee teamautonomie met top-down begeleiding
5. Zet faciliterende en actief meewerkende architecten in



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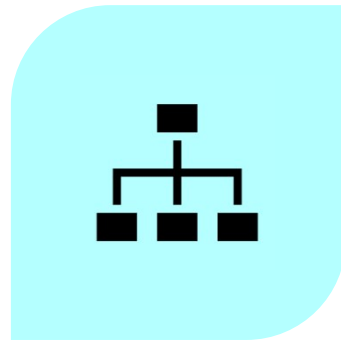
WRAP-UP

FINAL THOUGHTS AND DISCUSSION

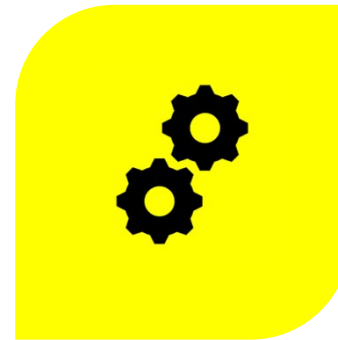
Kracht van de Toekomst



Agile en Architectuur, dus?



óf



‘AGILE WERKEN ONDER
ARCHITECTUUR’?

‘ARCHITECTUUR ONDER
AGILE WERKEN’?

Bedankt voor jullie tijd!

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Presentation based on the following papers:

- Van Wessel, R. M., Kroon, P., & De Vries, H. J. (2022). Scaling Agile Company-Wide: The Organizational Challenge of Combining Agile-Scaling Frameworks and Enterprise Architecture in Service Companies. *IEEE Transactions on Engineering Management*, 69(6), 3489-3502.
- Van Wessel, R. M., Kroon, P., & de Vries, H. J. (2023). Scaling Agile Company-Wide: The Organizational Challenge of Combining Agile Scaling Frameworks and Enterprise Architecture in Service Companies. *IEEE Engineering Management Review*.

[Download link:](#)

https://www.researchgate.net/publication/370960006_Scaling_Agile_Company-Wide_The_Organizational_Challenge_of_Combining_Agile_Scaling_Frameworks_and_Enterprise_Architecture_in_Service_Companies/references