# FORRESTER® CHALLENGE THINKING. LEAD CHANGE.

#### FORRESTER®

Towards a Digital Professional Body of Knowledge

**Charles Betz, Principal Analyst** 



Nov 8, 2017

#### What I will talk about

Understanding the current digital and IT landscape

Scale and the digital operating model

An "emergence" approach to the operating model

Founder
Team
Team of Teams
Enterprise

### **GPS Enrollments in spring 2017**

Headcount: 585, 35.9% women

Ethnicity: 43.6% person of color

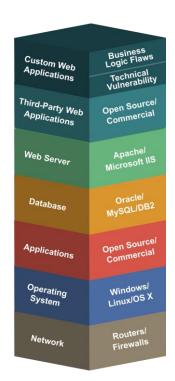
31.6% international

Average Age: 34

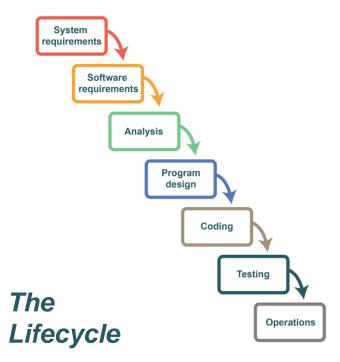
School of Engineering

St.Thomas

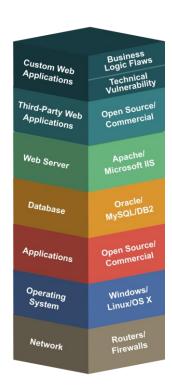
#### The narratives



The Stack



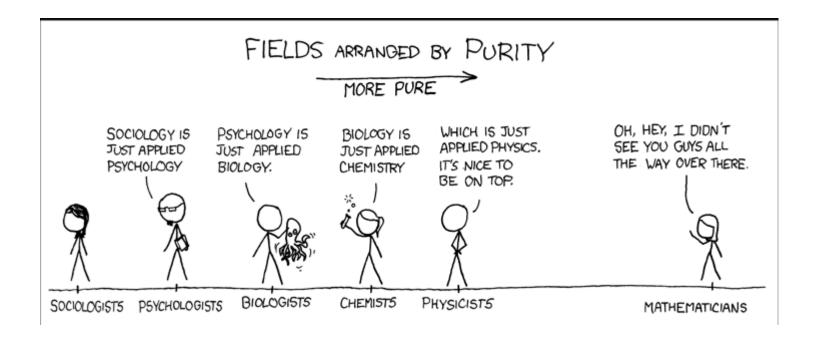
#### The stack



The Stack

Computer science (bottom-up)
OSI & TCP/IP
Zachman layers
TOGAF

#### Reductionism



#### The lifecycle (aka "plan-build-run")

Software engineering Most pre-Agile methods ITIL

**COBIT** 

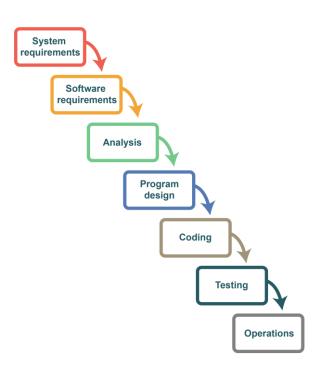
IT4IT

TOGAF "crop circles"

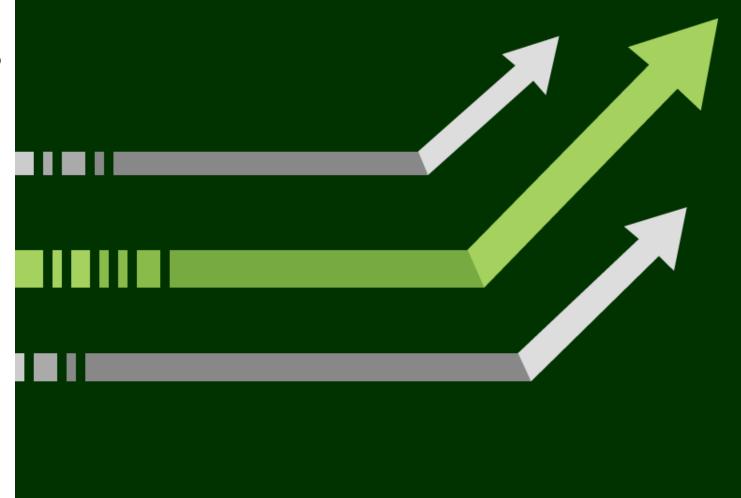
**PMBOK** 

**DMBOK** 

**SWEBOK** 



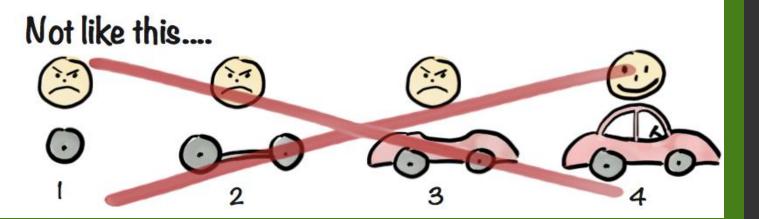
## How to transform?



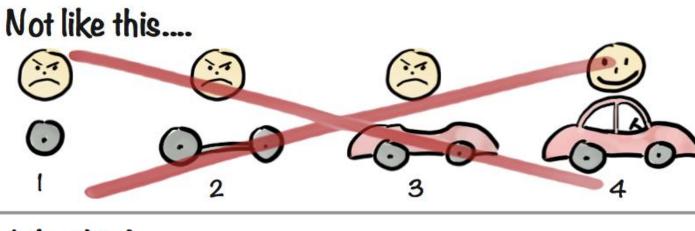


A complex system that works is invariably found to have evolved from a simple system that worked. A complex system designed from scratch never works and cannot be patched up to make it work. You have to start over, beginning with a working simple system

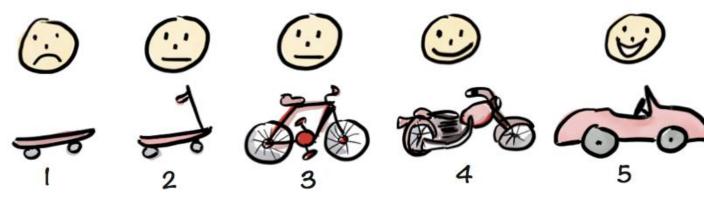
John Gall



A systems approach



### Like this!



A systems approach

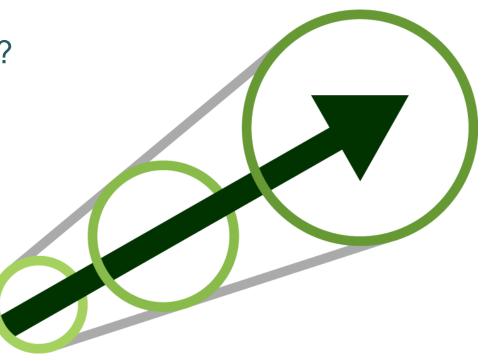
Henrik Kniberg

#### Scaling journey

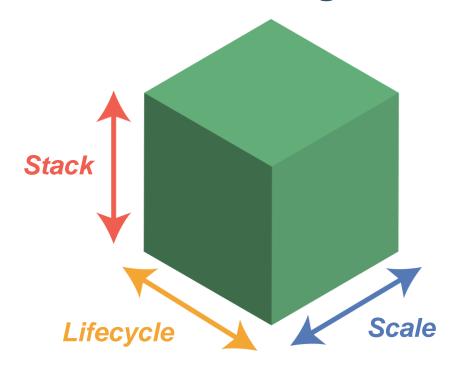
> What do we need? Why?

> When do we need it?

> How is it changing?



#### The 3 Dimensions of Digital Learning

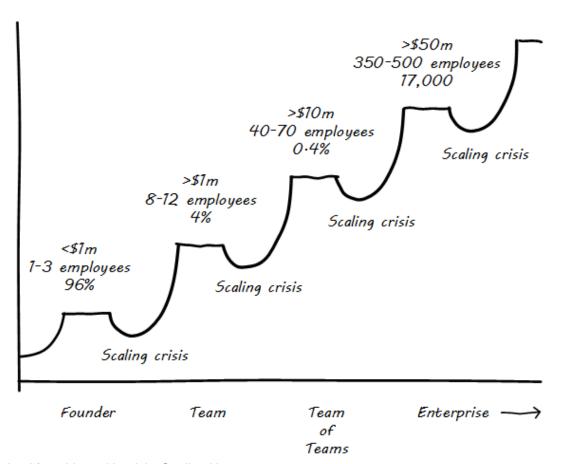




## The hero's journey

#### Quantifiable

## A basis for research and analysis



Derived from Verne Harnish, Scaling Up

#### **Scaling**



**Enterprise** 

**Team of teams** 

**Team** 

**Founder** 

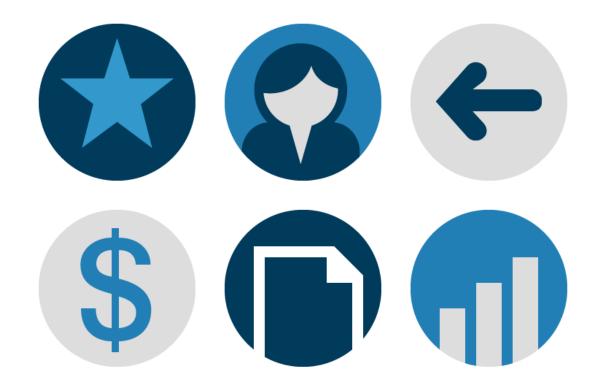


What do we need? Why?

When do we need it?

How is it changing?

#### **Founder**



#### **Digital Value**

From goods to services to experiences

Minimum viable product

Testing, learning, pivoting



#### Infrastructure

Minimum viable platform

Infrastructure as code

From snowflakes to cattle to ants to serverless

Opinionated platforms... full circle?



#### **Applications**

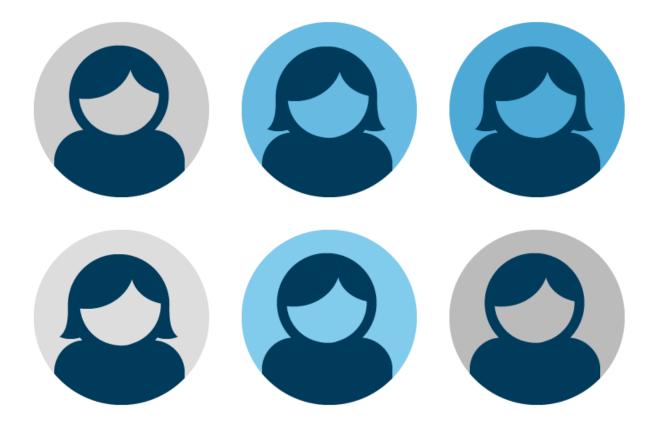
Fast feedback: **NOT OPTIONAL** 

Test-driven, continuously integrated & delivered

From batch handoffs to automated pipeline flow (release engineering)



#### **Team**



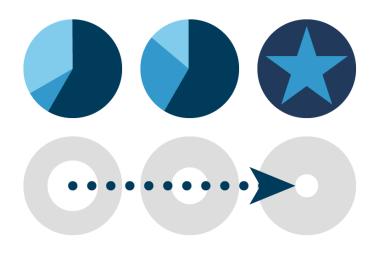
#### **Product Management**

Story, outcome, experience

High-bandwidth collaboration across specialties

Bring the work to the team

Not the team to the work



#### **Work Management**

Keep it light – formal process not needed yet

From control to selforganization



LIMIT WORK IN PROCESS

#### **Operations**

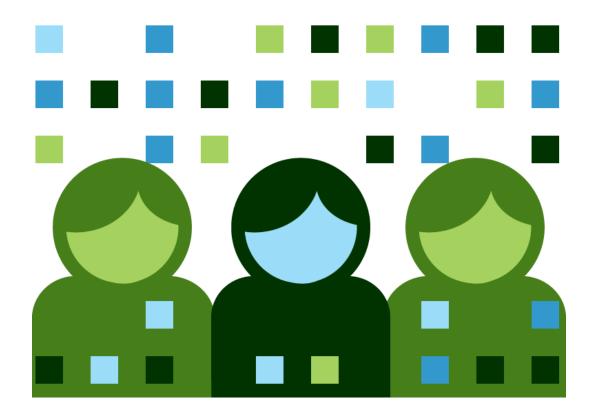
Interrupt-driven work

From "accountability" to blameless

Site reliability engineering & Web-scale



#### **Team of teams**



#### **Coordination**

From hierarchy to network

From defined to adaptive processes (e.g. Case Management)

From efficiency to effectiveness

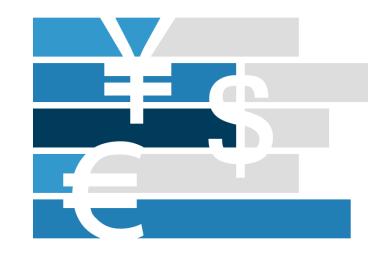


#### Investment

From HIPPO to DIBB (Highest Paid Person's

Opinion vs Data, Insight, Belief, Bet)

Project vs product portfolios; features v components



From cost of inputs to cost of delay

#### **Culture and Organization**

Functional vs product – Spotify model

From pathological to generative

Learning, inquiring organization

-"go and see"



#### **Enterprise**

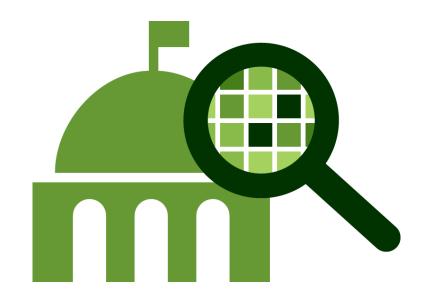


#### **Governance & Security**

From theater to antifragility

Automation is more auditable!

Heavyweight approaches can INCREASE risk of value loss

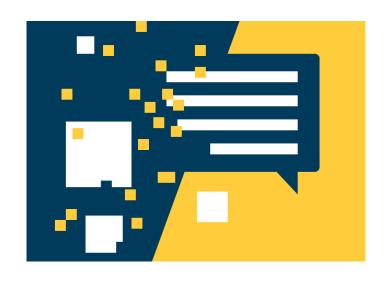


#### **Information**

Meaning

Records

From enterprise data model to domain-driven design



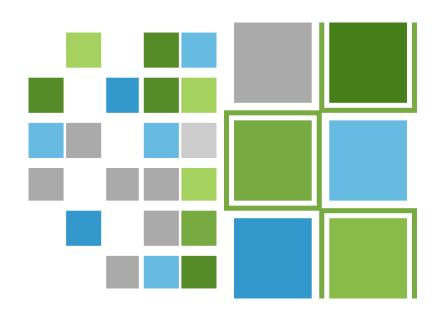
From binary to continuous

#### **Architecture**

From mandate to hypothesistesting

Technical debt, it's a thing

Architecture as code



#### From startup to enterprise

Continuity

**Architecture Information Management** Governance and Security

**Enterprise** 

Organization and Culture

Investment and Portfolio



Coordination

Collaboration

THE **SCALING PROBLEM** 

Coordination and Process **Team of Teams** 

**Operations** 

Work Management **Product Management** 



**Team** 

Founder/Individual

**Applications** Infrastructure Digital Value

Key state transitions.

Emergence & formalization are a function of scale

Creativity



**Emergence means formalization** 



# People need to see themselves



#### From startup to enterprise

Continuity

Architecture
Information Management
Governance and Security
Enterprise



Coordination

THE SCALING PROBLEM Organization and Culture
Investment & Portfolio
Coordination and Process
Team of Teams



Collaboration

Operations
Work Management
Product Management
Team



**Applications** 

Infrastructure

Digital Value

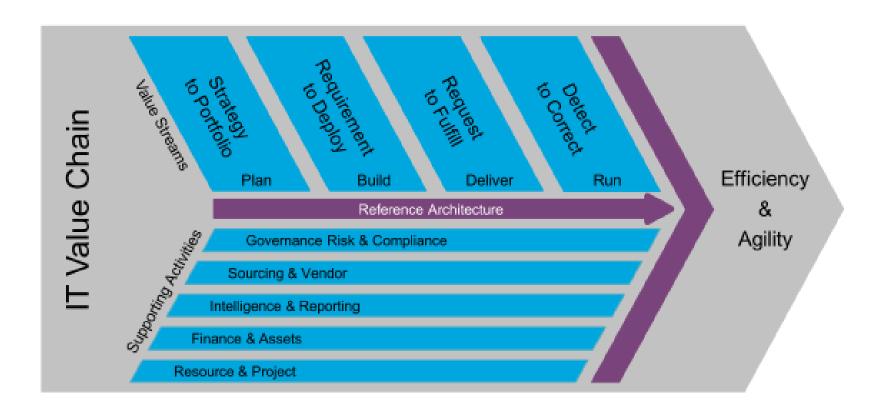
Founder/Individual



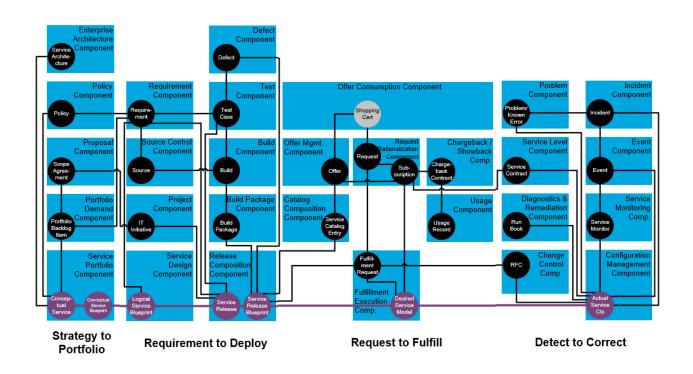


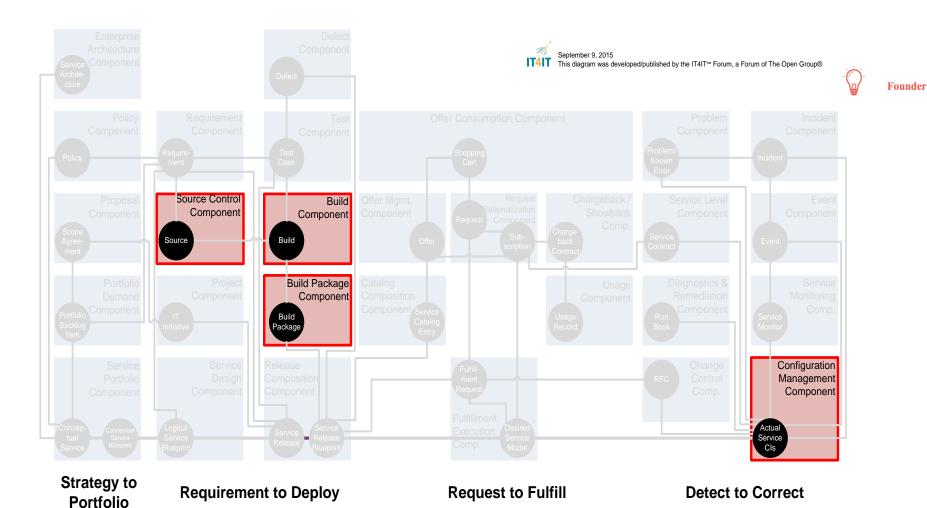
Creativity

#### **IT4IT Value Chain**

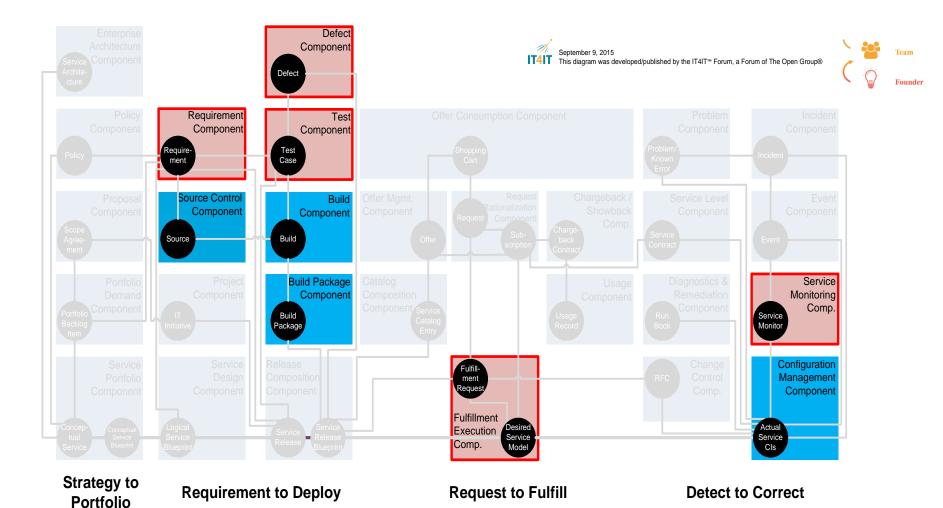


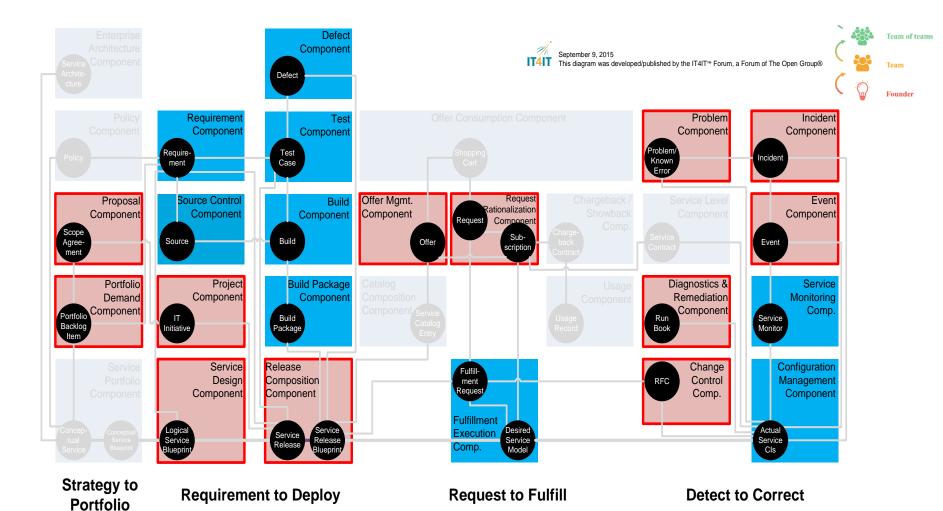
#### IT4IT™ Functional Model – v2.0



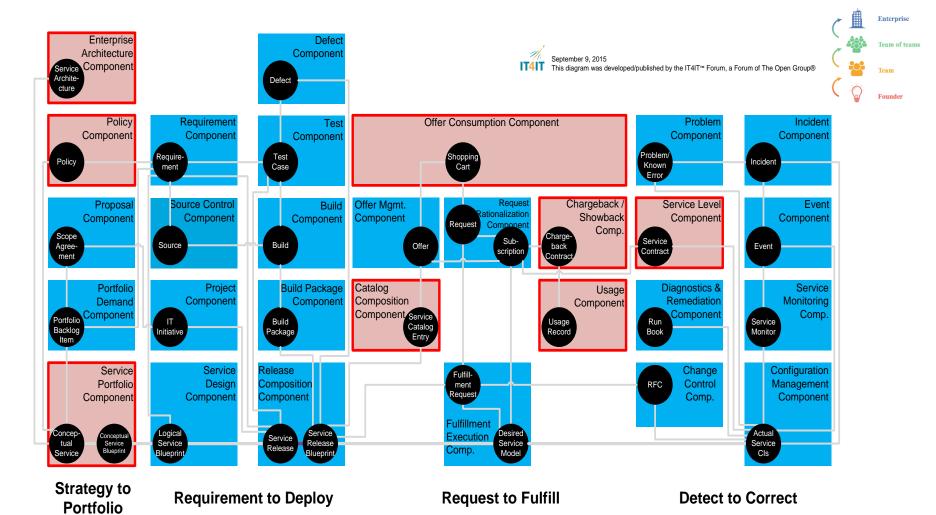


© 2017 FORRESTER. REPRODUCTION PROHIBITED.





© 2017 FORRESTER. REPRODUCTION PROHIBITED



### From startup to enterprise

Architecture
Information Management
Governance and Security
Enterprise



Organization and Culture
Investment & Portfolio
Coordination and Process
Team of Teams



THE SCALING PROBLEM

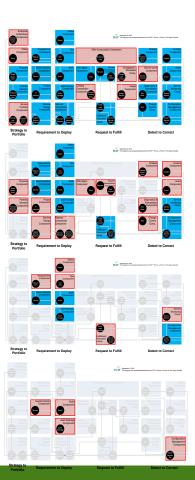
Operations
Work Management
Product Management
Team



Applications
Infrastructure
Digital Value







# Not just for entrepreneurs

- Applies also to a person in their career within an enterprise
  - Individual
  - Team lead
  - Group manager
  - Executive
- Or the journey of a new product within a company
  - Prototype
  - Pilot
  - Rising star
  - Cash cow



DevOps vs ITIL
Agile vs EA
SAFe vs Scrum
etc..



#### Let's get clinical

Cadence...
synchronization...
investment...
coordination...
feedback... flow...

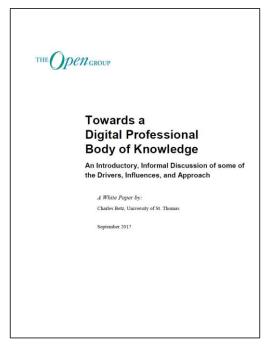


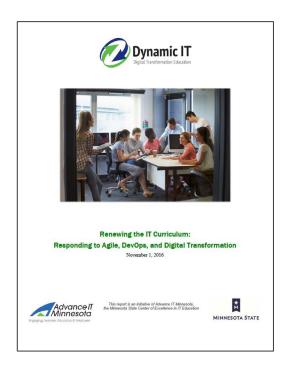
## Recap

- Digital learning takes place along multiple dimensions
- > A scaling model can help you orient

# Current work







# FORRESTER®

Charles Betz +01 612 868 2754 cbetz@forrester.com

# Thank you