DevOps
VALUE SCAN

Microsoft Partner

Gold Cloud Platform
Gold Data Analytics
Silver Application Development
Silver Data Platform

Microsoft

Agile Way of Working

Goal

"Your job as VP of IT Operations is to ensure the **fast**, **predictable**, and uninterrupted flow of **planned work** that delivers **value** to the **business** while minimizing the impact and disruptions of **unplanned work**, so you can provide **stable**, **predictable**, and **secure** IT service"

CHALLENGES

MOST AGILE
TRANSFORMATIONS
WILL FAIL

CHANGE
PROCESS MODEL

PERFORMANCE

INTRODUCTION OF
AGILE / SCRUM / WHATEVER

PREVIOUS PERFORMANCE

NEW PERFORMANCE

CHAOS

RESISTANCE

ACCEPTANCE & LEARNING

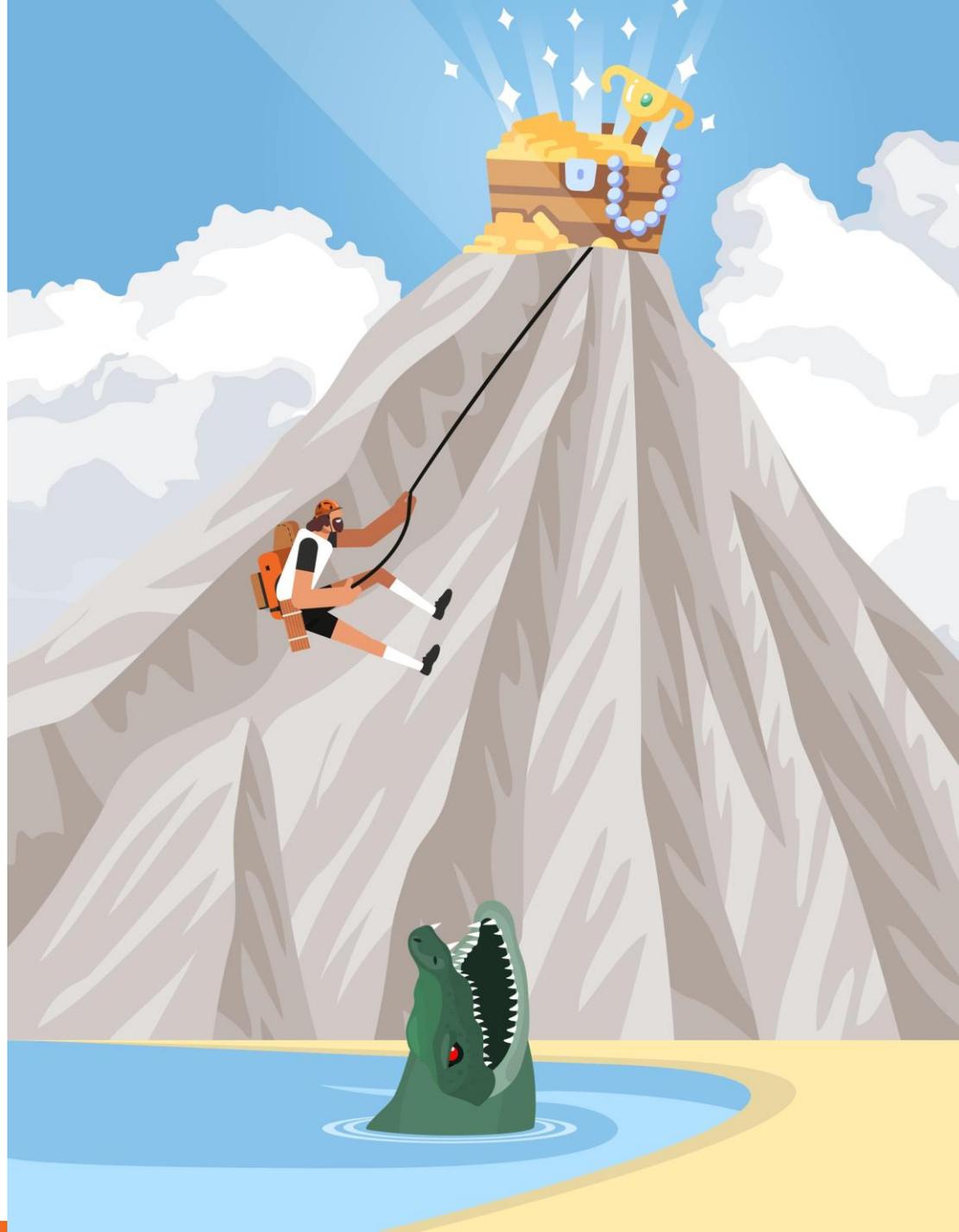INTEGRATION

(TROUGH OF DESPAIR)

TIME
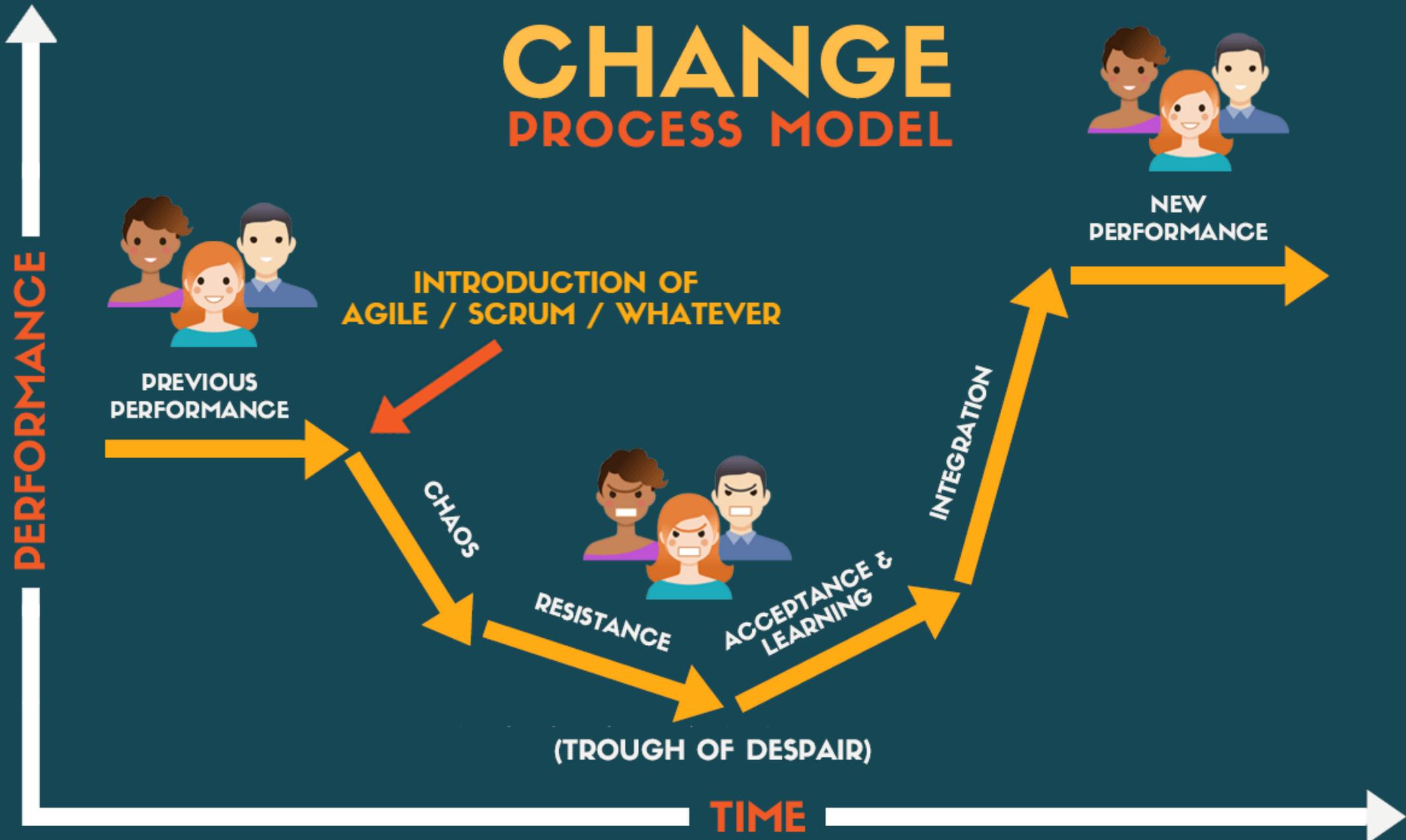
Agile Transformation Fails
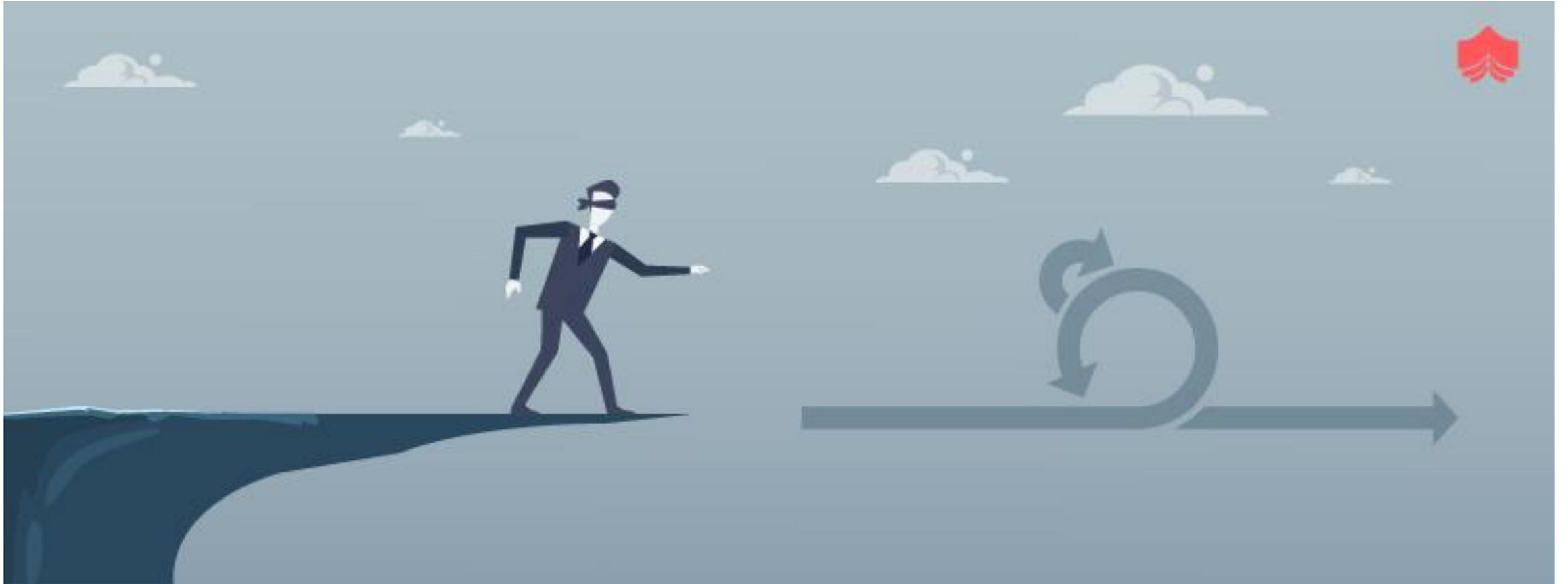
Drive the Change

Planned vs Unplanned Work

VISION

"**Unplanned** work is what **prevents** you from **doing** it. Like matter and antimatter, in the presence of **unplanned** work, all **planned** work **ignites** with incandescent fury, incinerating everything around it."

Quote – The Phoenix Project
Gene Kim, Kevin Bear & George Spafford

VALUE

The material or monetary worth of something

VALUE BASED PRICING

The IT budget is derived from the value created.

Value can be revenue (SaaS) or an IT system supporting a certain process with a relative budget.
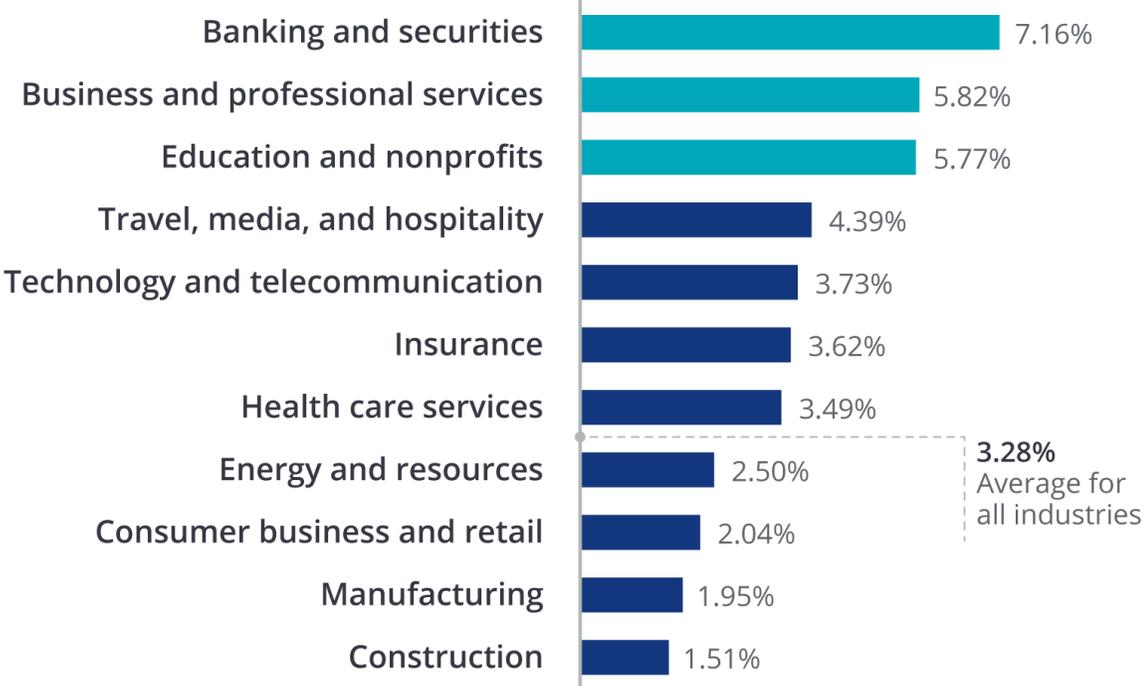
Cost Based Pricing

OLD

| Product | Cost | Price | Value | Customers |

Value Based Pricing

NEW

| Customer | Value | Price | Cost | Product |

Even for non IT companies there is an easy way to calculate the 'monetary worth'

By example based on benchmark reports

| Industry	Value
Banking and securities	7.16%
Business and professional services	5.82%
Education and nonprofits	5.77%
Travel, media, and hospitality	4.39%
Technology and telecommunication	3.73%
Insurance	3.62%
Health care services	3.49%
Energy and resources	2.50%
Consumer business and retail	2.04%
Manufacturing	1.95%
Construction	1.51%

3.28%
Average for all industries

Source: Deloitte 2016–2017 Global CIO Survey, N=747.

Deloitte Insights | deloitte.com/insights

THE CONE OF UNCERTAINTY

Uncertainty on required effort is the biggest risk in IT projects.

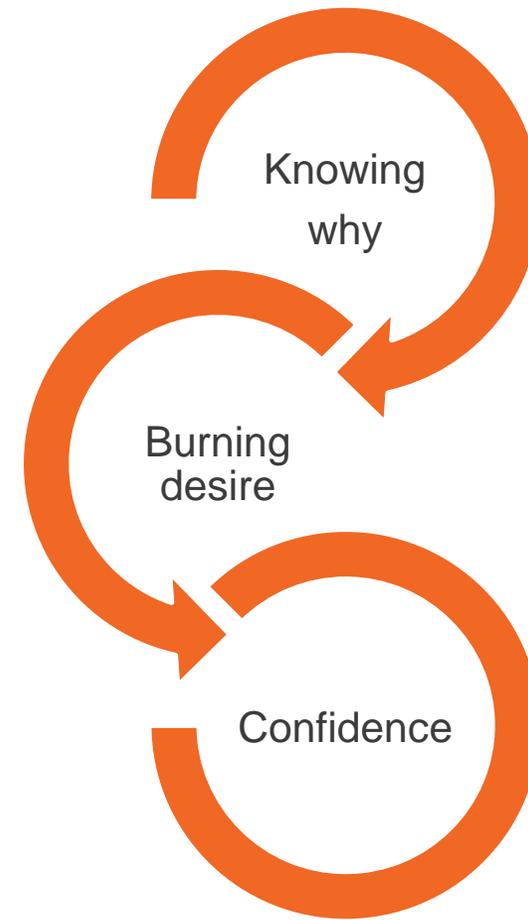The only way to manage IT projects successfully is to reduce uncertainty in a controlled way.

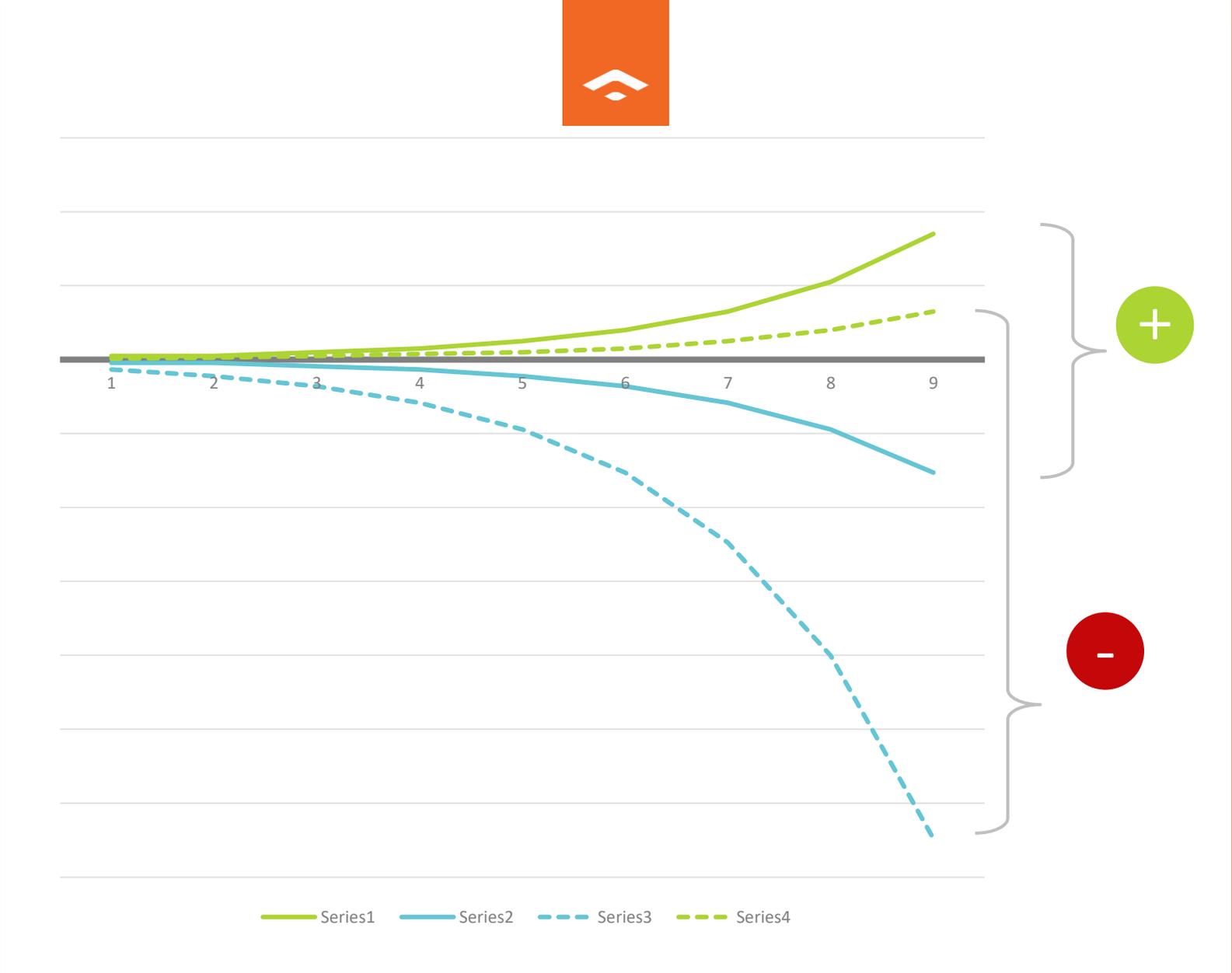Funding based on continuous business case (=value) monitoring.
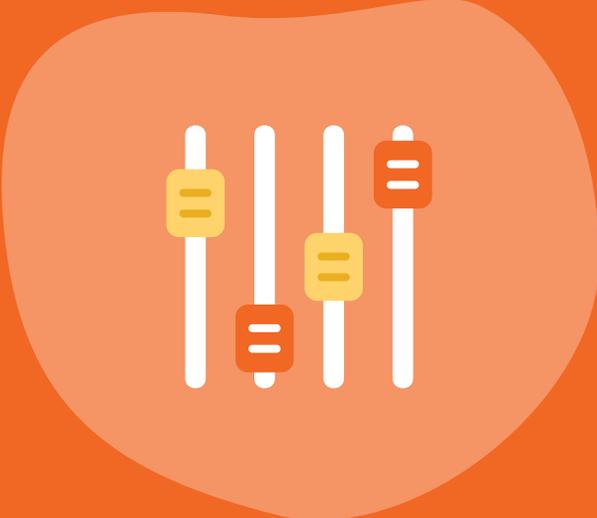

Time

Investment

Revenue

OPEX

Reduce uncertainty
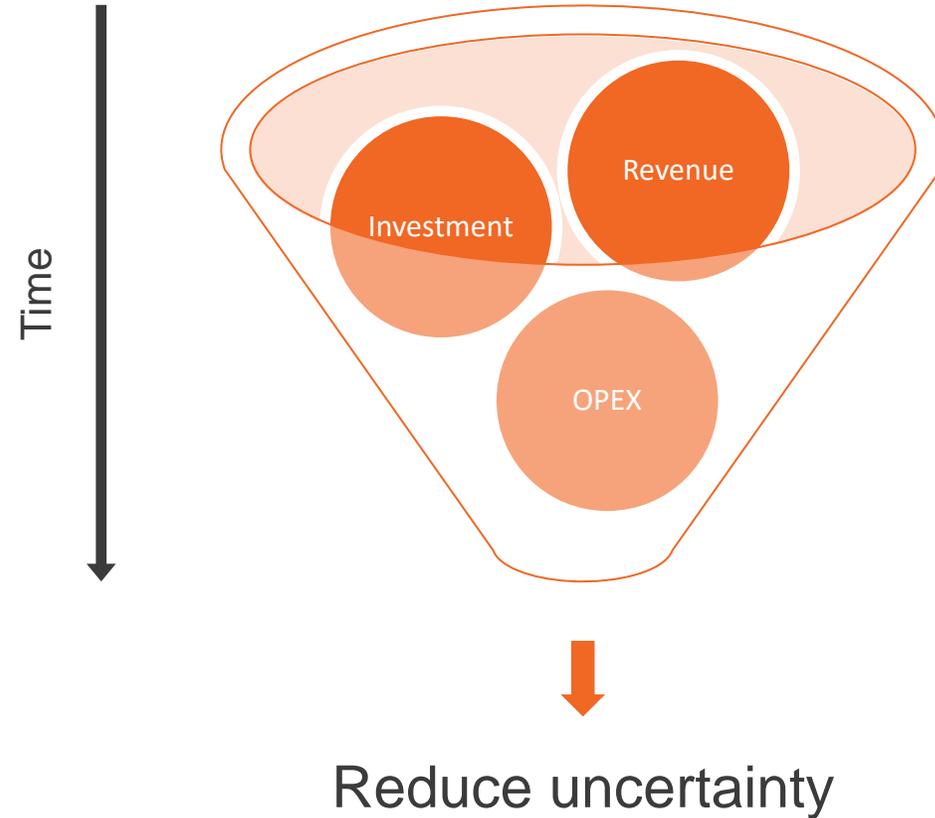
CONTINUOUS LEARNING

Way-of-working to support continuous learning (e.g. scrum)

Transparency on successes and failures

Knowing why

Burning desire

Confidence

BUSINESS CASE UN-CERTAINTY

Series1   Series2   Series3   Series4

ORGANIZATION MODEL

Business & Customers

DevOps

Goal

Business Ruling
& Operations
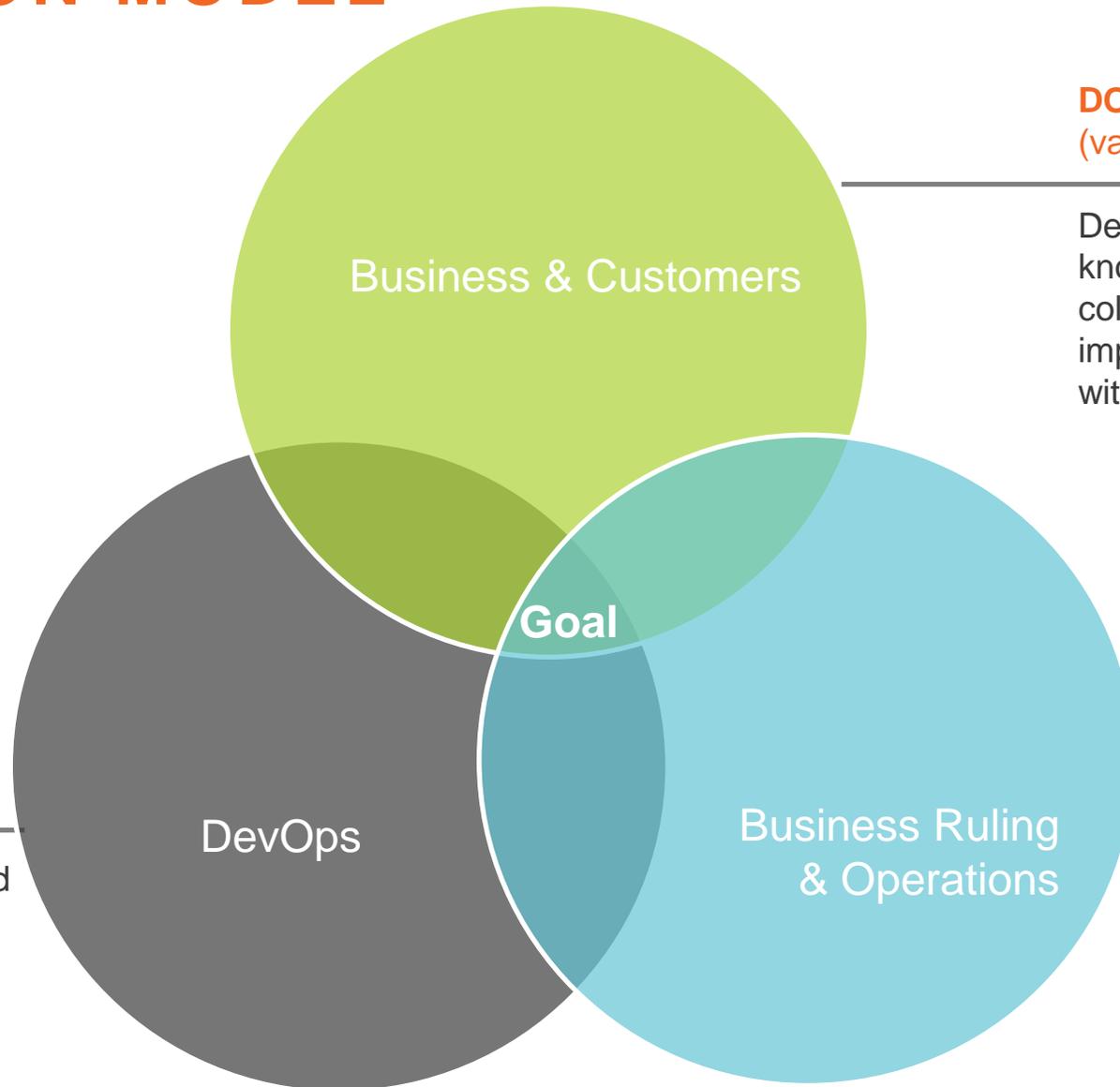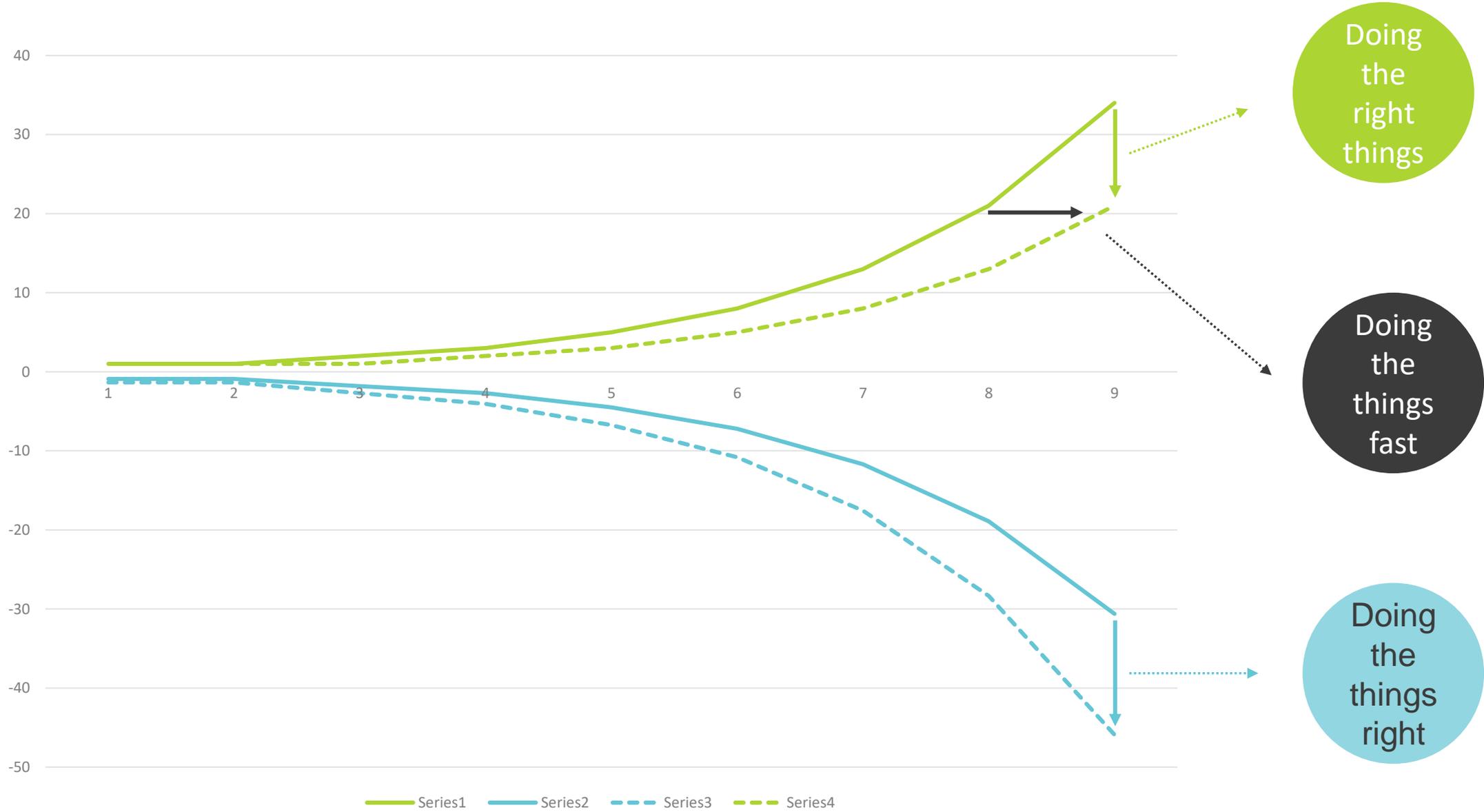
DOING THE RIGHT THINGS
(value)

Delivering the desired services knowing your customer wishes, with collaboration and engagement of important stakeholders in alignment with your business goals.

DOING THE THINGS RIGHT
(quality)

Delivering high quality services while making it predictable and safe using Continues Integration & Continuous Delivery and Security & Quality Framework.
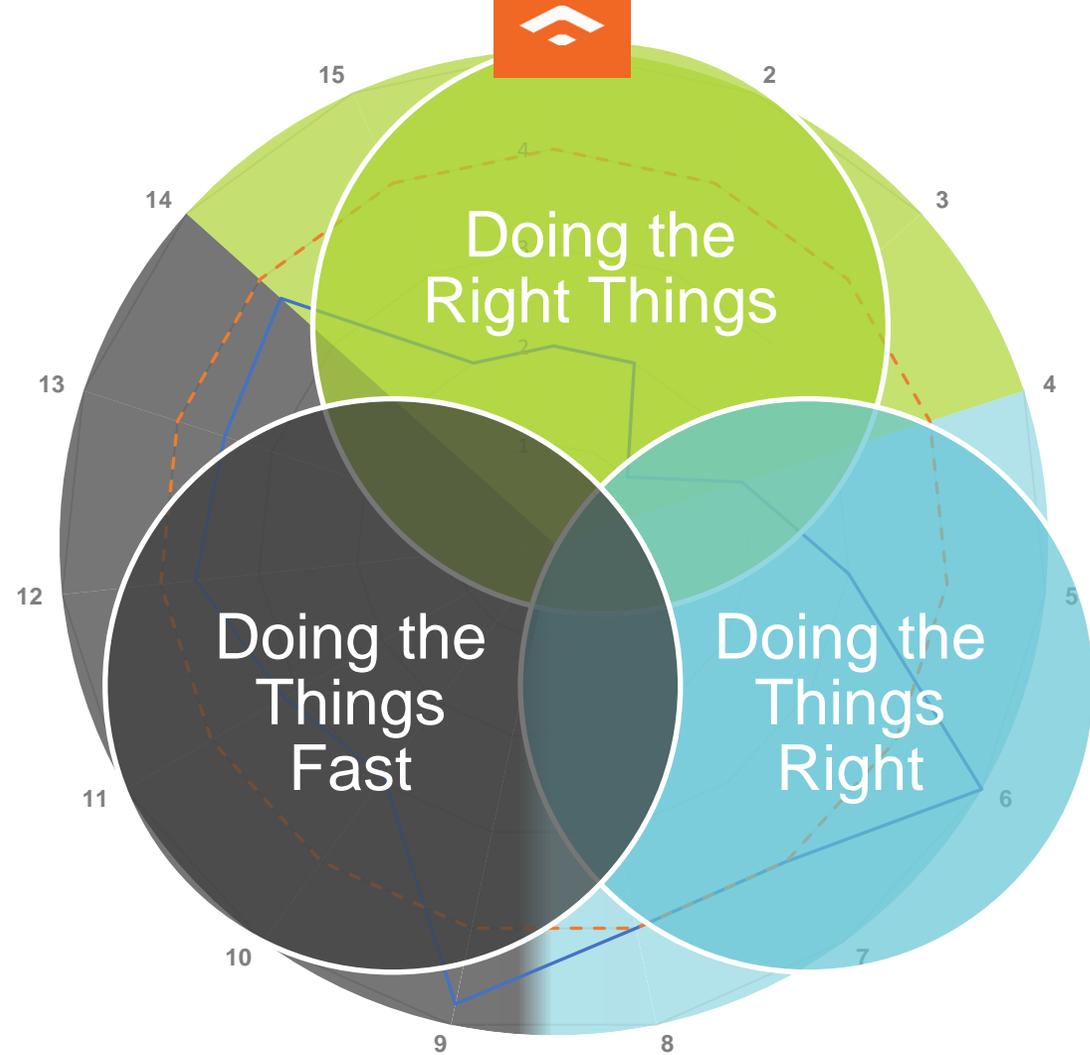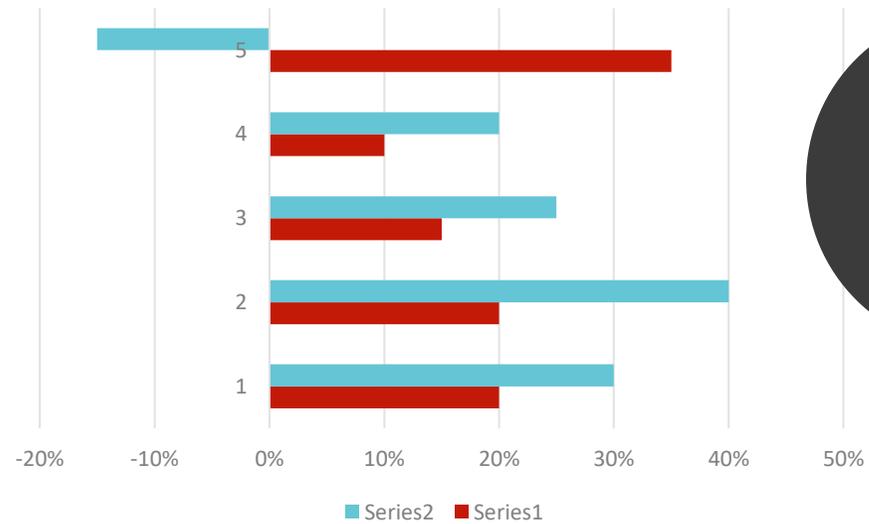
DOING THE THINGS FAST
(time 2 market)

Efficient and optimized automated building processes, starting small and agile, while being able to overcome impediments fast and adjust quickly when necessary.

DOING RIGHT THINGS

		Business Case	Risk Mngt	AI	ProductMngt	Backlog	Years in operation
LEVEL	**5**	Prediction: System suggests measurements based on actuals and forecast	Optimized: Integrated risk management incl. Risk appetite, tolerances, KRIs and predictive analytics	Transformational: AI is part of business DNA	Mature Suite: Product management only based on quantitative analysis. R&D through acquisitions	User Voice	End of Live / Phase-out
LEVEL	**4**	Forecast: The business case reports are generated automatically and include a forecast based on actuals.	Managed Systematic: Integrated Risk Management including Qualitative and Quantitative analysis	Systemic: AI is pervasively used for digital process and chain transformation, and disruptive new digital business models	Scaled Product: Product management only based on quantitative analysis only	More business (new service)	> 2 years
LEVEL	**3**	Automated: The business case reports are generated automatically and can be reviewed anytime.	Top Down Repeatable: Systems in place to monitor critical risks	Operational: AI in production, creating value by process optimization or product / service innovations	Business Case Validated: Design and product management, add customer types and functionality	Improve business case	2 years
LEVEL	**2**	Periodically: There is a business case which is being evaluated at least every year. Overview is created manually.	Initial Siloed: Repetitive qualitative risk analysis on every business case	Active: AI experimentation, mostly in a data science context	Product / Market Fit: Business model, value proposition, platform, functionality	Existing contract requirements	1 year
LEVEL	**1**	Initial: There is no financial business case or it has been made initially but not updated over time	AD-HOC: Manual risk analysis, no supporting systems in place	Awareness: Early AI interest with risk of overhyping	Startup: Research, design, product mngt and possibly some engineering	Laws and regulations	< 1 year

Priority vs capacity

Maturity Report

DOING THINGS FAST

```
                    ┌──────────────┐
                    │ Doing Things │
                    │     Fast     │
                    └──────────────┘
        ┌──────────────────┼──────────────────┐
┌──────────────┐   ┌──────────────┐   ┌──────────────┐
│  Option 1:   │   │  Option 2:   │   │  Option 3:   │
│   TeamNow    │   │questionnaire │   │  ref model   │
└──────────────┘   └──────────────┘   └──────────────┘
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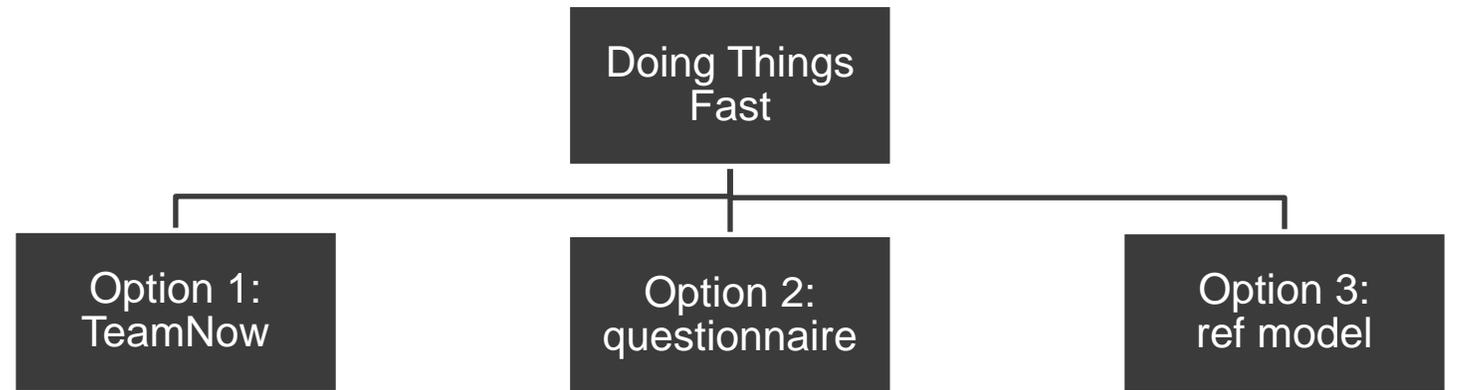
DEVOPS DASHBOARD

Backlog Items done, Workdays Spent, PBI's unplanned & Current Velocity

Burndown Chart

Backlog Items age

Planned vs Unplanned Work

Planned Effort vs Velocity

Backlog items vs Bugs

DEVOPS MATURITY MODEL

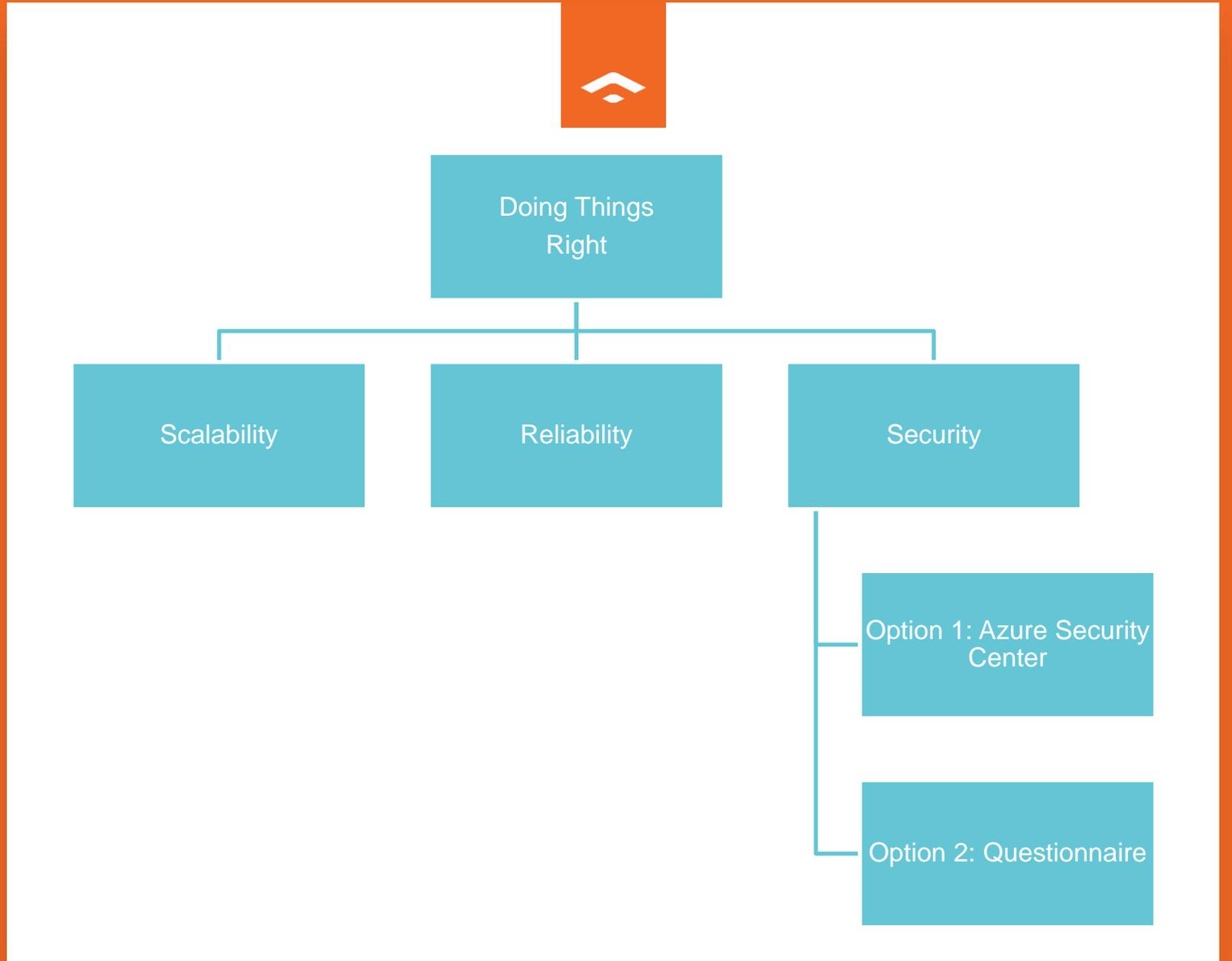|	DevOps	Reporting	Testing	Provisioning	Deploying	Building
LEVEL 5 Complete	Operations and development are both part of the multidisciplinary delivery team and share responsibilities	Reports also provide trend analysis.	100% fully automated tests all the way to production	Self Service portal for requesting an environment.	Continuous end-to-end deployments	End-to-end automated gated builds.
LEVEL 4 Advanced	An envoy of operations works along in project, an envoy of development works along with operations.	Dashboard provides insight from different perspectives and shows history and progression through a build monitor to all	Automated dynamic quality tests like security scans, functional and performance tests guarantee quality of code.	Environment can be created and torn down by a push of the button. Operating System is virtualized.	Test-gated deployments of end-to-end applications. Deployments occur over multiple environments.	Central build environment. Teams actively reuse generic components in a secure and controlled manner.
LEVEL 3 Average	Development and operations work together when this is required	Graphical and textual reports accessible through dashboard.	Automated static code and security analysis after code check in.	Environments are identical. Several tools used to provision and configure an environment.	Environments are identical. Roll out of applications performed by a push of the button. Auto-deployment to DTAP.	Build on commit. Archived components are made available for reuse by other teams.
LEVEL 2 Beginner	Code accompanied with release notes with which operations should install and manage the application.	Reports generated on request by system administrator. Reports are graphical in nature.	Automated tests are initiated as soon as code is checked in. Tests are focused on unit/ component testing only.	Scripted installations per component for each server. Surrounding systems manually configured.	Self service deployments to development and test.	Automated builds are performed in a central area and activated manually.
LEVEL 1 Base	Operations engaged at the end of the project	Reports generated on request by system administrator. Reports are text based.	All tests require manual activity. Some tests are automated but have to be installed by hand.	Manual installation and configuration of software for middleware, databased, applications servers, etc.	Deployment through execution of separate deployment- and db scripts. Manual configurations and installs / env.	Builds are performed on local workstation by use of one or more separate build scripts.

DOING THINGS RIGHT

	Scalability	Reliability	SECURITY			Cost Control
			People	Process	Technology	
LEVEL 5	Multi-tenant with load balancing and auto-scalability features to handle (peak) load (microservices)	0-1 prod incident / year	Culture supports continuous improvement to security skills, process, technology	Processes more comprehensively implemented, risk-based and quantitively understood	Controls more comprehensively implemented, automated and subject to continuous improvement	Pro-active automated advices to lower the costs per (micro) service
LEVEL 4	Multi-tenant with load balancing features to distribute load	2-3 prod incidents / year	Increased resources and awareness, clearly defined roles and responsibilities	Formal Infosec committees, verification and measurement processes	Controls monitored, measured for compliance, but uneven levels of automation	Regular cost savings are executed. Costs per operational unit are continuously going down.
LEVEL 3	Single instance for all clients, customizing through metadata	5-8 prod incidents / year	Some roles and responsibilities established	Organization wide processes and policies in place but minimal verification	More controls documented and developed, but over-reliant on individual efforts	Cost control is embedded in DevOps process
LEVEL 2	Separate application instance for each client but customizing available by changing settings	8-12 prod incidents / year	InfoSec leadership established, informal communication	Basic governance and risk management process / policies	Some controls in development with limited documentation	Cost for Resource Group and / or (Micro) Service are known but not linked to value streams / departments
LEVEL 1	Separate application instance for each client (monoliths)	> 12 production incidents / year	Activities unstaffed or uncoordinated	No formal security program in place	Activities unstaffed or uncoordinated	Cost for Resource Group and / or (Micro) Service are unknown

NO
EXCUSES

GET INSIGHTS NOW
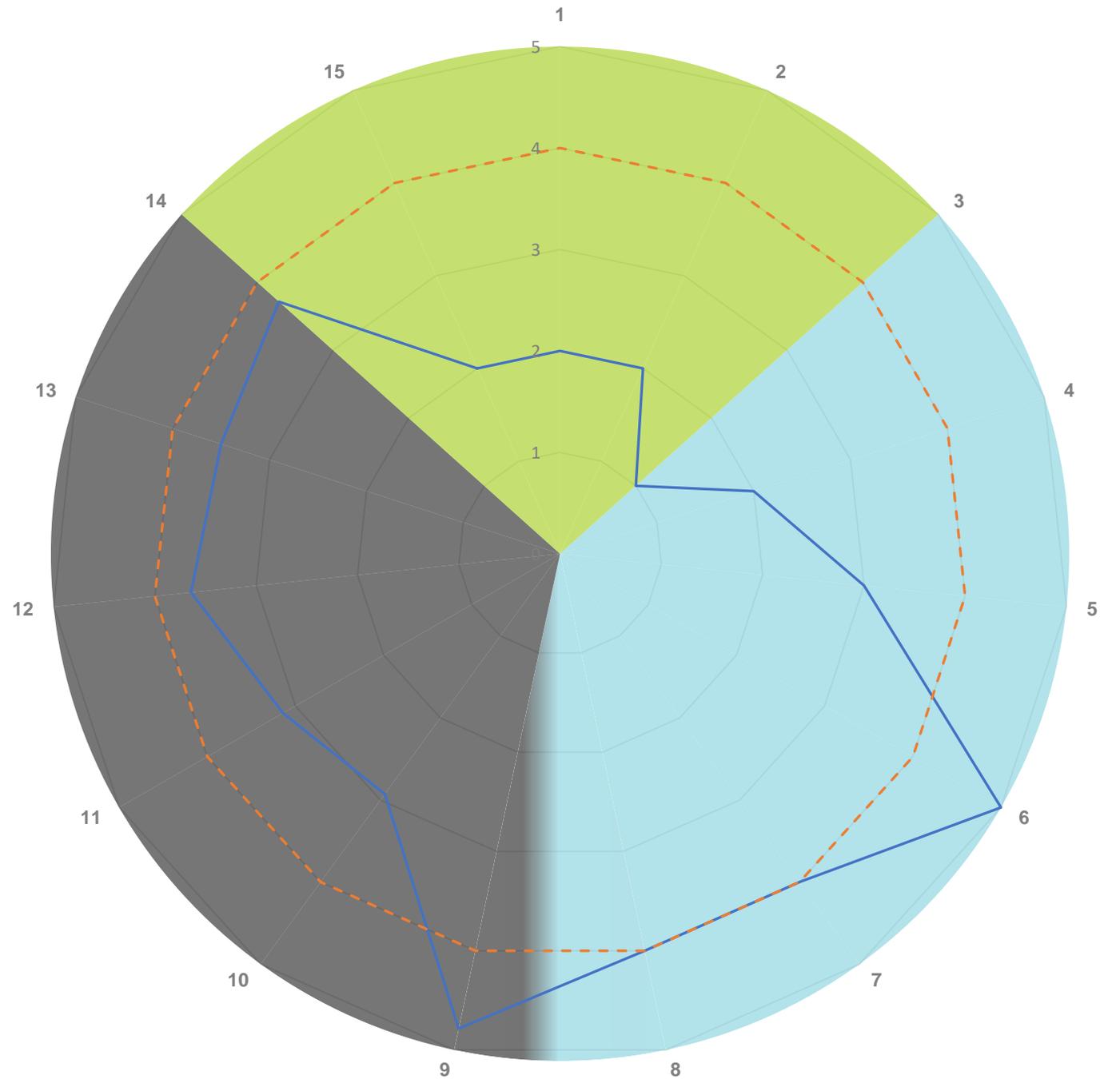
OUR PROPOSAL

We start with identifying which change(s) will add the most value.
The outcome/insights gives us a prioritized roadmap which we execute together with IT and Business employees.

	Step 1 Quantitative Analysis	Step 2 Qualitative Analysis	Step 3 Report & Advice
	Benchmark the current level of Maturity	Interviews with the stakeholders per topic	Report & Evaluation
Activities	Kickoff: Maturity Scan: Analysis tooling will scan the Line of Business systems Analysis: Data scientist will harvest the data and plot it on the Maturity Model	Interviews: Several interviews will be scheduled with stakeholders to ask in depth questions per Maturity pillar Analysis: Qualitative responses will be used to refine the level of maturity	Report: Presenting report to stakeholders
Output	▪ Factual overview of the Maturity Scores ▪ Input for the several interviews	▪ Hardening of the Maturity Level ▪ First draw of report for internal review	▪ Report: Based on the effort to scale up in the Maturity pillar. Including the (rough) estimated outlook of the cost & revenue

+/- 1 week

2 to 3 weeks

**The IT Value scan is a combination
of both quantitative and qualitative research
leading to ensure legitimacy within the
organisation**

DIGITAL BUSINESS HUMAN RESULTS

TEAMVALUE

PREPARATION
Requirements

Resources

Project start architecture

User stories

Product / Service delivery

VALUE PROPOSITION
Product / Service vision

Users

Management

Dynamics in the market

Mandate

Stakeholders

START HERE

MANAGEMENT
Vision / Roadmap

PRODUCT OWNERS

BIZ DEV OPS

SCRUM proces

Requirements

Retro

Release to production

Product increment

Demo

Sprint planning

Daily scrum

Stakeholder

Product Owner

Technical Mind

DevOps team

Factory

Change

- Value-based Prioritization
- Iterative Development/ DevOps Practices
- Self-Organization
- Empirical Process Control
- Time-boxing
- Collaboration
- IT as Service Broker & Partner

Regulations & Policies

Data Classification

Cloud Solution Patterns

Product Owners Service Mgmt.& Security Consultants

Security Control Framework

Service Management Control Framework

Platform Design Decision Document(s)

WHY

WHAT

Requirements

Solution BizDevOps Team per Workload

Solution Architecture Management

Requirements

Product Management / Feature Team

Requirements

Platform Management

Solution

PLAN — RELEASE
DEVELOP+TEST — MONITOR + LEARN

Product Co-creation

HOW
Product Catalog

HOW Certified Product

Deployment Templates / Scripts

Documentation

HOW Deployment packages

PLAN — RELEASE
DEVELOP+TEST

WHAT **Existing & New Features**

Platform Design Decision Documents

PLAN — RELEASE
DEVELOP+TEST — MONITOR + LEARN

HOW Deployment packages

Solutions

Platform

Legend

Organization

Staff