



Dare to Do!

Multi-disciplinary digital ecosystem
and DevOps
@ KPMG Switzerland

DevOps Enterprise Summit,
Amsterdam 2023



Journeymen with you today...



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KPMG Switzerland

@dinkargupta

KPMG Switzerland – rooted in rich history of 113 years

Inspires confidence, empowers change and dares to do

235

Employees

133

Partners

56

Nationalities

34

Average age

11

Locations



42 %
Women

58 %
Men

17 %
Part-time employees

Global Organizational Network



>70

Alliances with technology companies like Microsoft, ServiceNow, Salesforce, IBM and Oracle



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Context – Our growth strategy



The slide features a background image of a hand-drawn map of Switzerland. Overlaid on the top left is the KPMG logo and the text "Dare to grow". Below it, "Our ambitions" and "KPMG Switzerland" are written. On the bottom left, the text "Change means opportunity" and "Setting the right priorities is key to success." is displayed. A large blue callout box on the right contains the main message: "Technology-led change is our business!" followed by "Enabled by a high-performance digital technology ecosystem". At the bottom of the slide, a small black box contains the text "Change is our business."

Dare to grow

Our ambitions
KPMG Switzerland

Change means opportunity

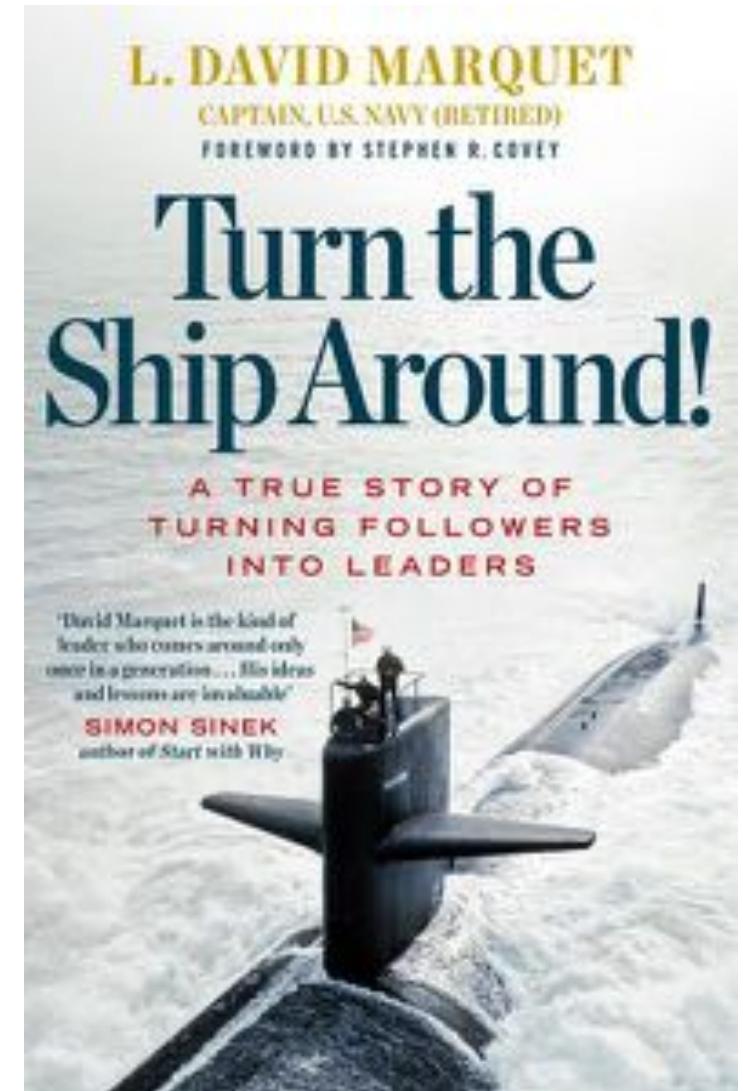
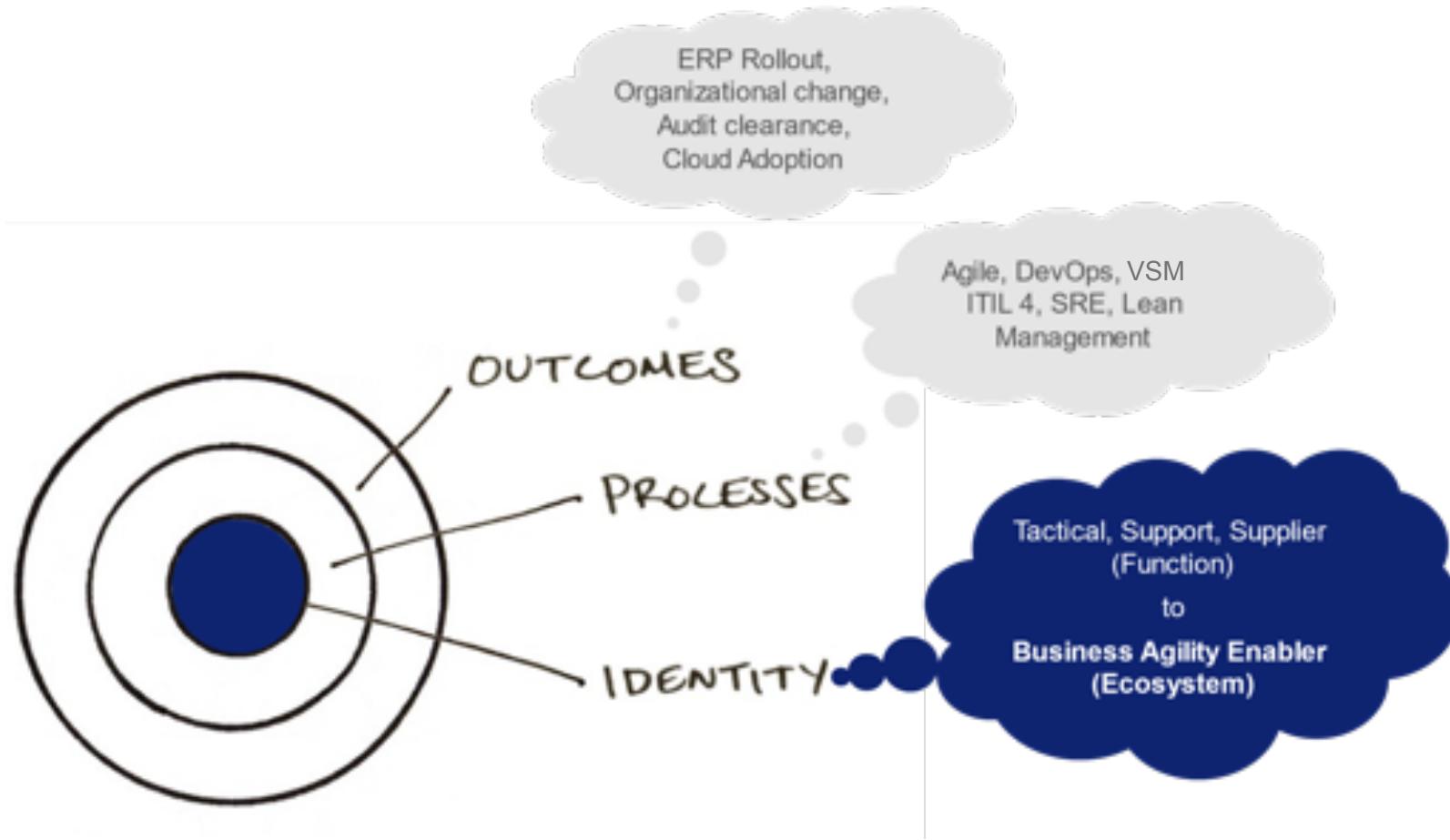
Setting the right priorities is key to success.

Technology-led change is our business!

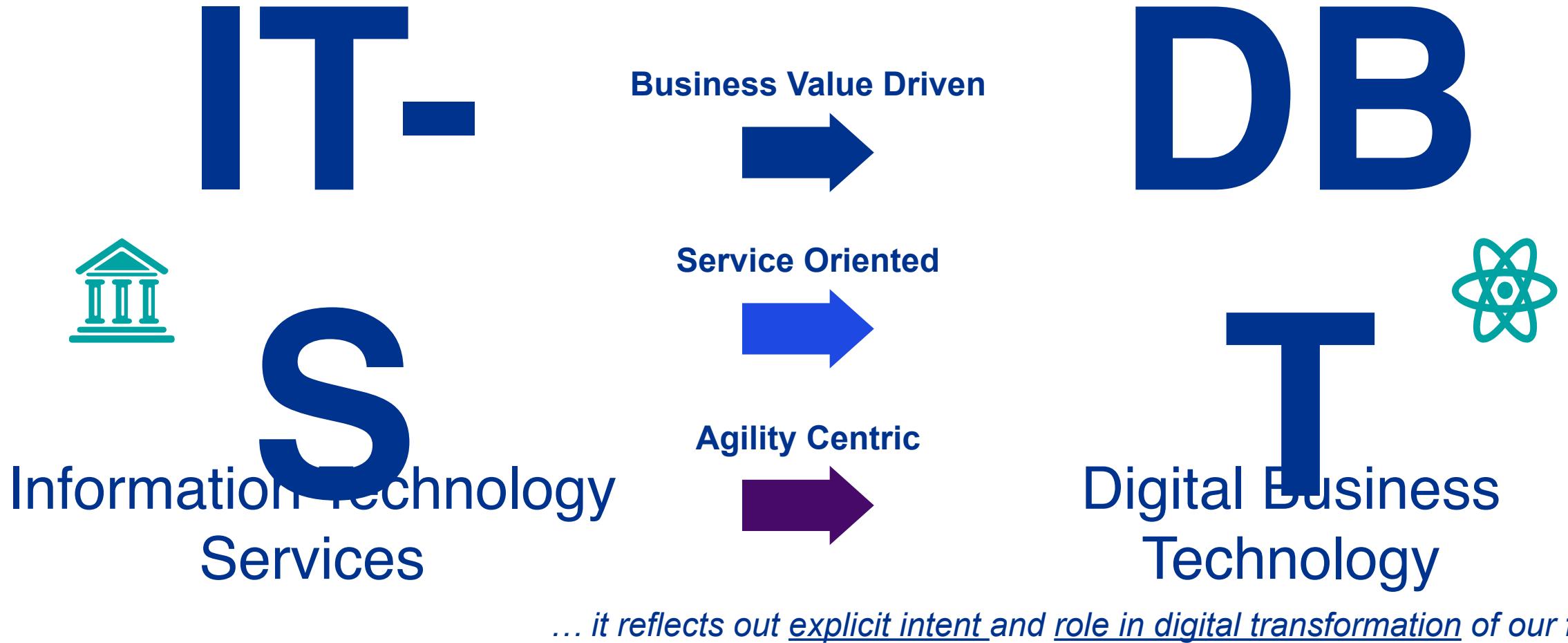
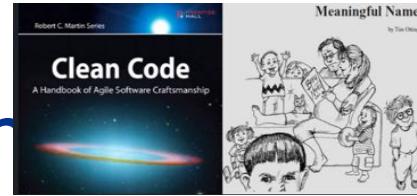
Enabled by a high-performance digital technology ecosystem

Change is our business.

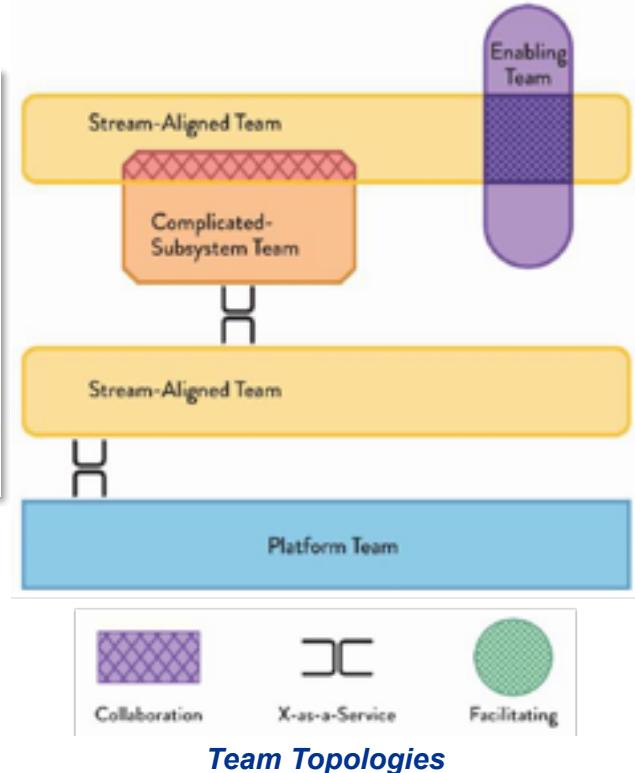
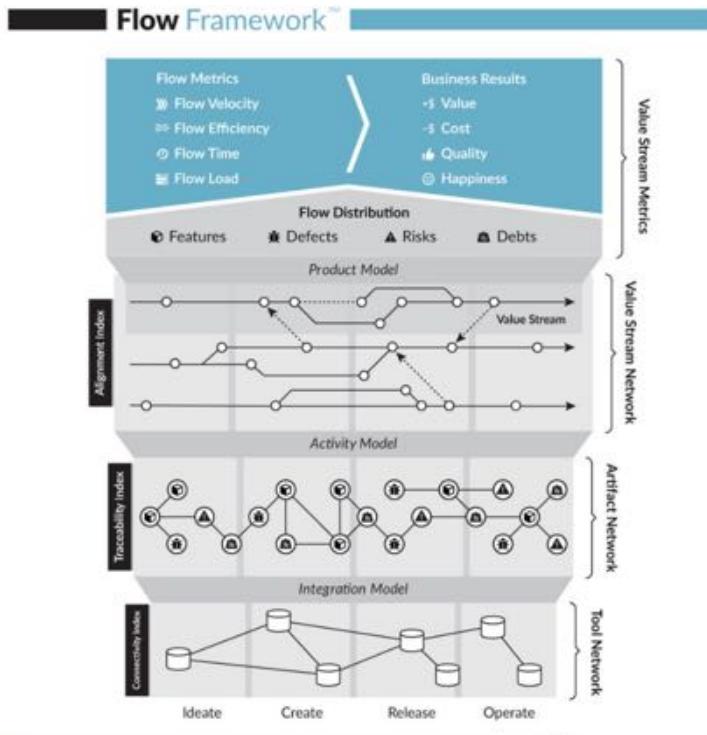
Transformation choice we made



“What’s in the name ?” – The identity problem



DevOps Enterprise Community helped frame the guidance



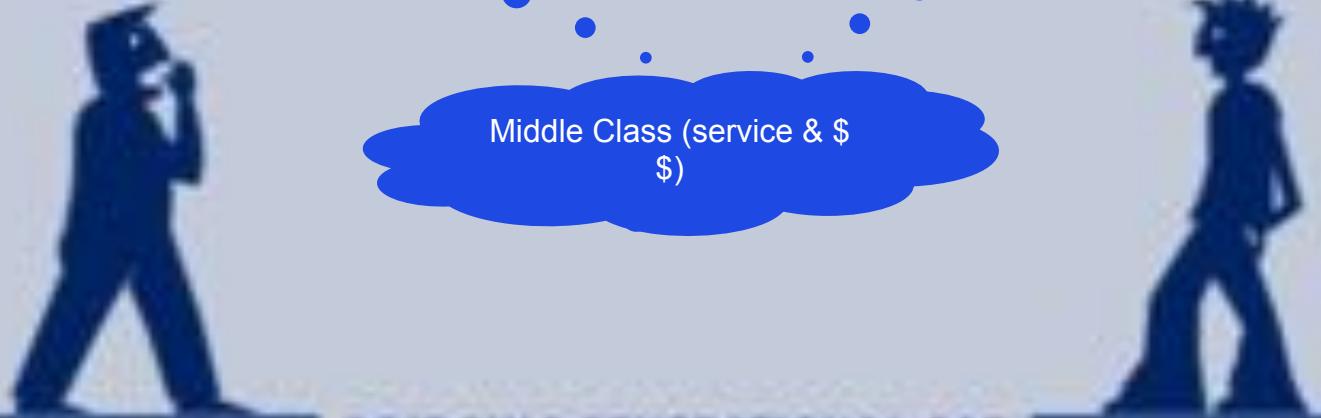
Cloud Centricity

However....

Neither FANGs (tech & \$\$\$\$\$\$)

Nor one product/app start-ups

Middle Class (service & \$
\$)



Glorious legacy
that stood the test
of time ...

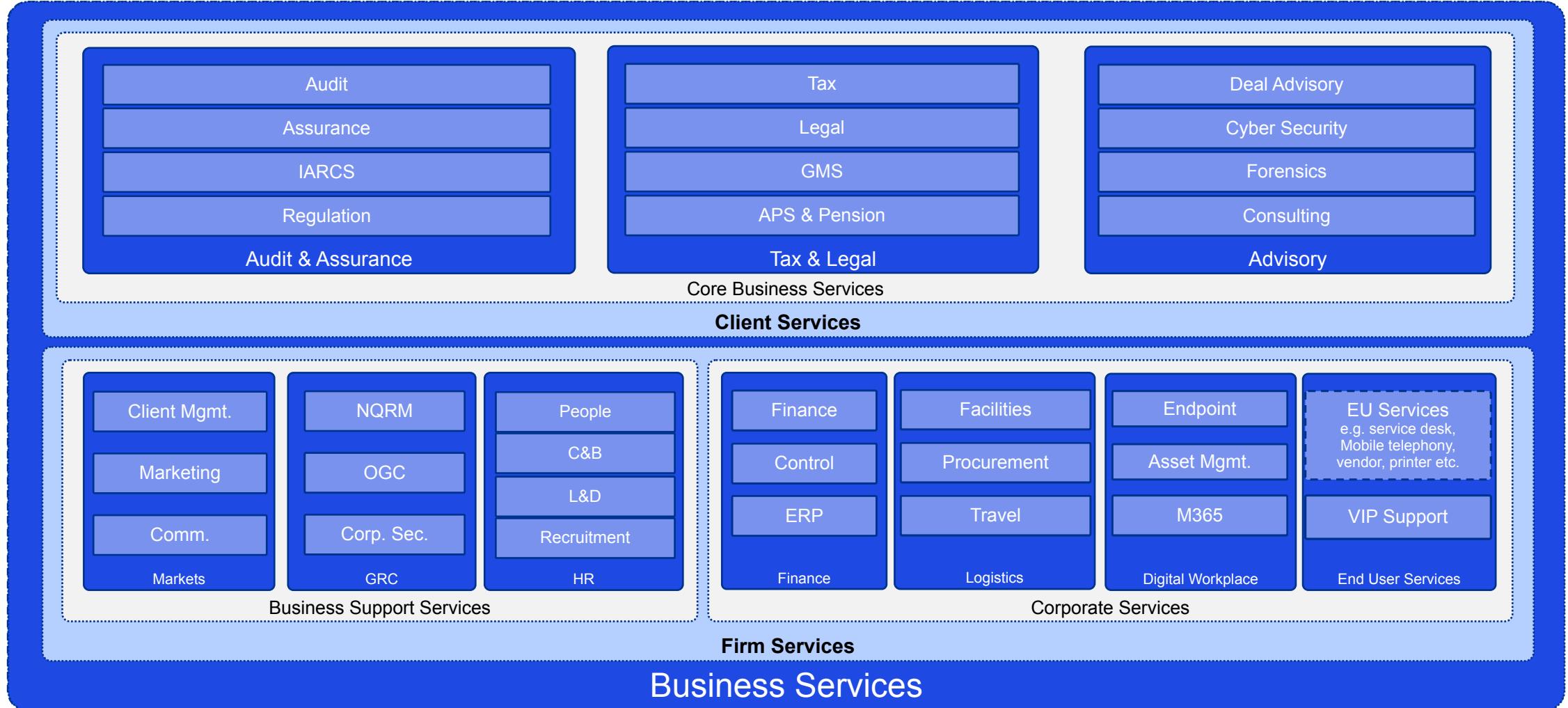


Glorious future
embracing continuous
change ...

Our strategic pursuit – Sustainable Business Agility



We organized ourselves in business aligned portfolios



Managing interactions through defined (evolving) Team APIs

Platform Services

Team API

- Team name and Role: Service Delivery Platform [https://O365CH.ServiceDeliveryPlatform-test](#)
- Team type: Platform
- Part of a Platform Group? Yes Details: team is part of [O365IT](#)
- Do we provide a service to other teams? Yes Details: Via support, maintain and enhance IT infrastructure in On-premises datacenters and Cloud datacenters in O365, more details for all services in our [Services](#)
- What kind of Service Level Expectations do other teams have of us? Only defined SLA's requests for Service Delivery team have an expected delivery time of 10 days
- Software owned and evolved by this team
- Versioning approaches (How we communicate changes to services and code?)
- Wiki: [https://O365CH.ServiceDeliveryPlatform](#) = [O365IT - Documentation](#)
- Chat tool channel: [O365IT.ServiceDeliveryPlatform](#) = [O365IT - Documentation](#)
- Time of daily sync meetings: Weekly meeting, every Wednesday 10:00 - 11:30, accessible via Teams: [Click here to join the meeting](#)

What we're currently working on

- Our services and systems [Team Statuspage](#)
- Ways of working: Team is monitoring [ServiceNow](#), [Documentation](#) for support tickets assigned to main show group. Team assignments to operational ownership is defined in [Team Operational Ownership](#)
- Other cross-team or organizational improvements: Build new Cloud Infrastructure using O365CH OnePlatform offering with 2 products Region Hosting and Country Hosting. Application migration from current on-premises solutions will follow in 2023.

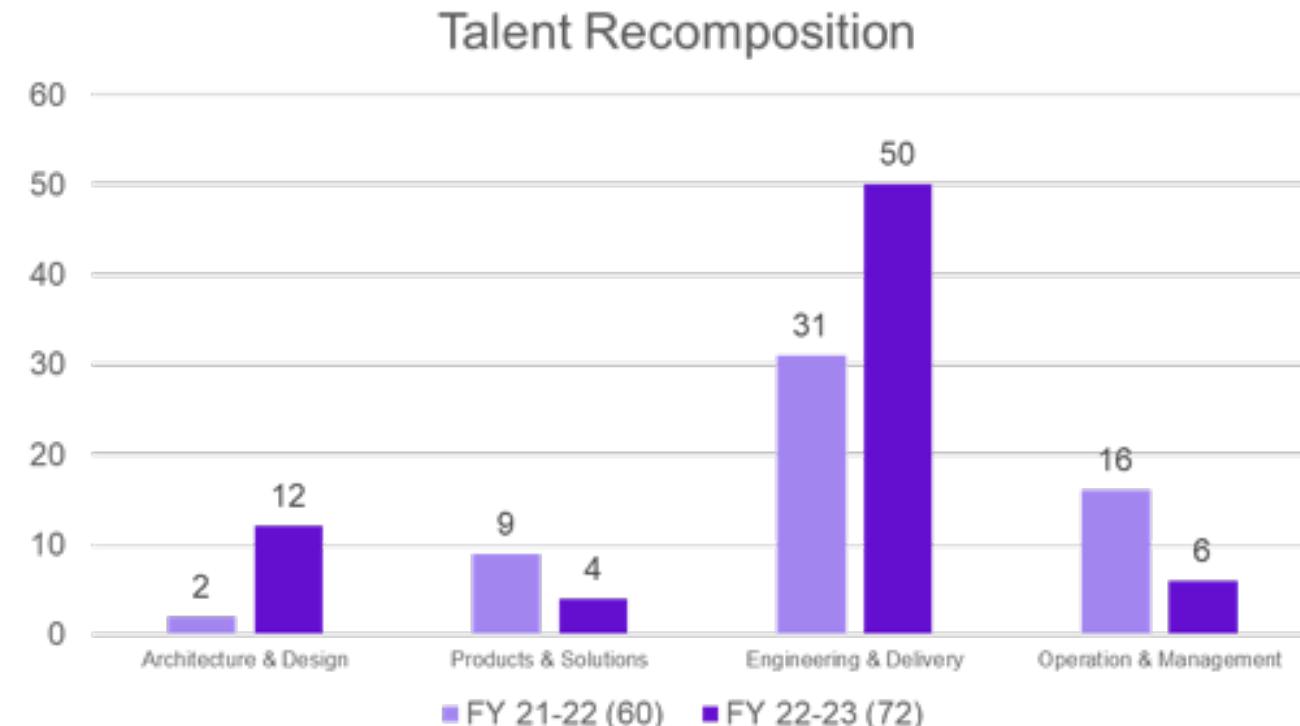
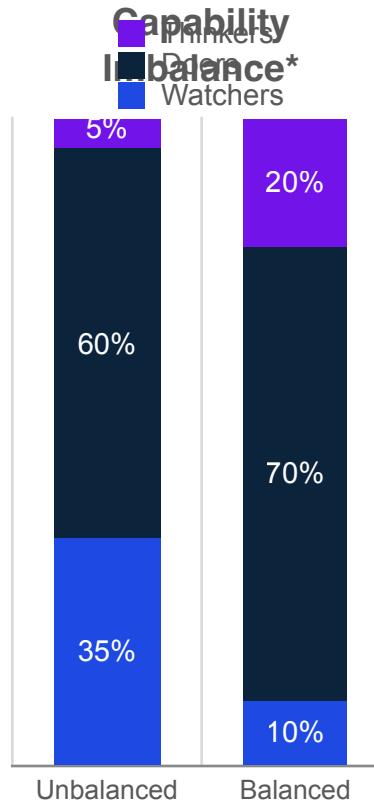
Teams we currently interact with

Team name/Role	Interaction Mode	Purpose	Duration
KMPG OnePlatform team	Project Based (Cloudflare)	Support of Project, guidelines to move apps in Regional Hosting	2022-2025
Any O365 user raising Changes	via Service Now - Create/Change	Infrastructure related changes for provisioning, changing, decom hardware assets	Continuous
Any O365 User raising Request Fulfillments	1. Various technical requests // 2. One Platform Country Hosting Service ticket related requests // 3. Decommisioned O365 cloud services	Infrastructure related requests for provisioning, changing, decom hardware assets	Continuous
Any O365 User raising Incidents	ServiceNow , Incident		Continuous
Hotline		24/7 hotline for issues users are reporting	Continuous
Enterprise Services, Service Now	Project Based	Implement Cloud alert and monitoring system interfaces with company IT service management system	Continuous
Enabling Services DevOps Engineering	Enabling	Enable DevOps capabilities, enhance knowledge and awareness	Continuous
NITSO	Project	Security and compliance assessments for currently using & in development platforms, services and processes	Continuous
Enterprise Services/Third	Project	Security gaps in Change Management, Logging and Monitoring processes	Continuous

Teams we expect to interact with soon

Rebalancing our talent portfolio for capability uplift

We strive to achieve a good balance across the spectrum – **each discipline matters!**

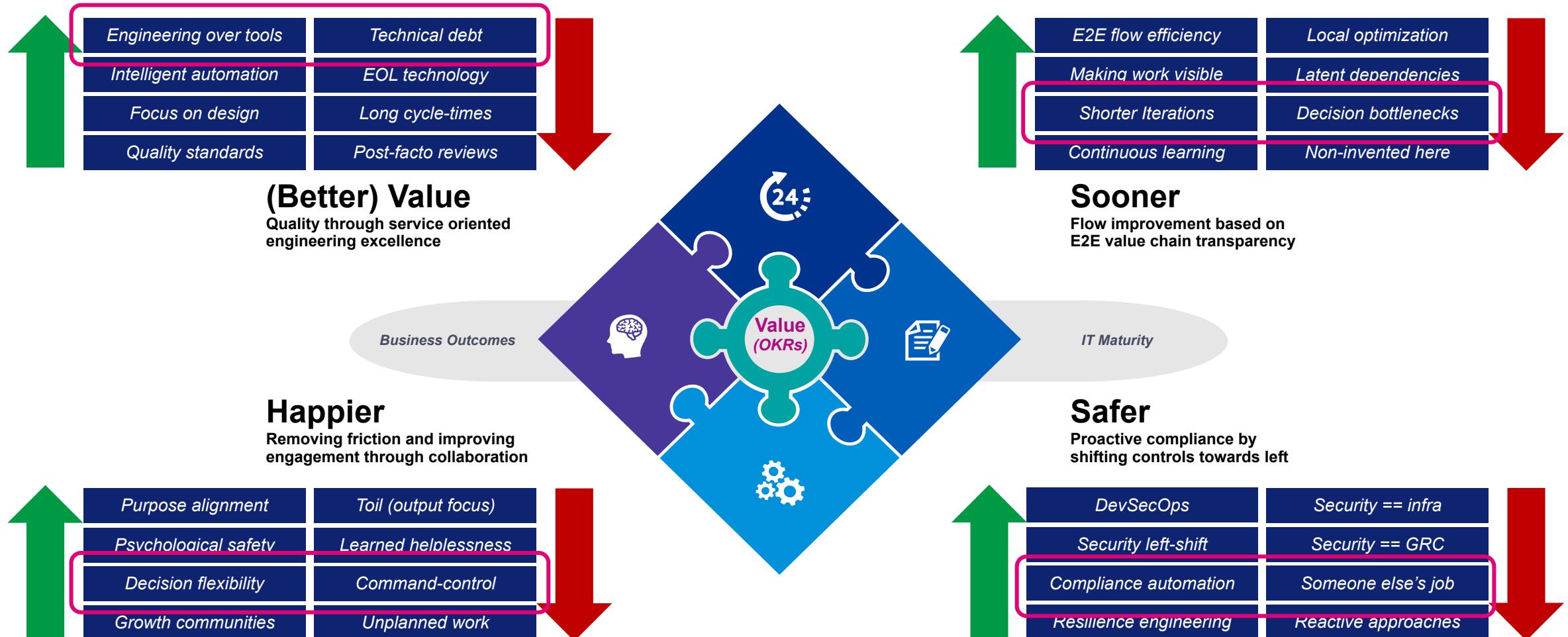


Establishing Multi Disciplinary Team * for collective ownership

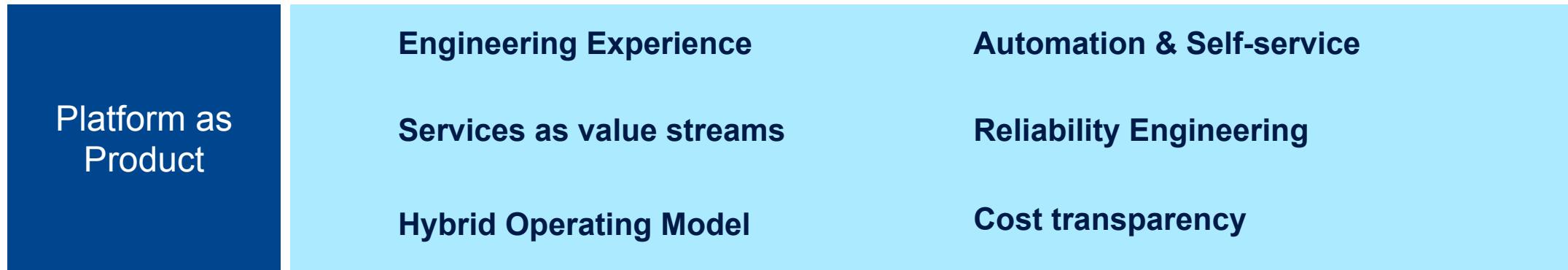


* Following a product-trio approach, each portfolio (or a significant service/product within) is co-owned by MDT leads

Adopting #BVSSH to inform change, ground-up



Adopting platform model for service delivery infrastructure



Significant considerations for success of our service delivery platform

- **Value alignment** (Adopting cloud for business value flow objectives, not cheaper data center)
- **Operating model design** (technology-only perspective. Organizational, business and cultural changes)
- **Service chains management** (dependencies hidden in plain sight can be risk value flow & quality)
- **Operational readiness** (function of weakest link – both in terms of availability & security)
- **Data migration** (underestimating the effort and complexity of existing data gravity)
- **Financial discipline** (stuck in Bill-of-material mindset, cloud WILL be more expensive than on-prem)

“Cloud Isn’t IT Procurement; It’s a Lifestyle Change” ~ Gregor Hohpe

Moving to portfolio management on ground-truth (data)*



- Features (new business value)
- Defects (quality improvements)
- Risks (GRC, security, privacy)
- Debts (tech debt reduction)



- Productivity (frequency & lead time)
- Quality (failure rates & time-to-recover)

HR Domain

Backlog Analytics Epic/Feature Timeline Feature Timeline Epic Roadmap + New Work Item

Order Work Item Type Title State

+ Domain HR Services Active

Portfolio Attraction / Employer Branding Active

Product MyWhy Active

Epic MyWhy Solution Decommissioning Approved

Operations MyWhy Solution Decommissioning Initiation New

Operations MyWhy Solution Decommissioning New

Staffing of 1 FTE for Software Solution Engineer approved
Re-staffing c. discussion on suitable profile tbd

Closed Flow items trend

Last 90 days
73 Days on average (Created to Completed)
 23 Feature 3 Operations

Enablement Team Cycle Time

Last 90 days
60 Days on average (Started to Completed)
 23 Feature 3 Operations

Facts & Figures of the Month (Feb)

- Amount Tickets received: 175 (increase by 11 tickets comp. to Jan)
- Amount Tickets resolved: 173 (increase by 17 tickets comp. to Jan)
- Approx. time for resolution per ticket: median 31d

Cumulative Flow distribution- closed items

Open flow items distribution

Risk health

Assignment table

	Defect	Feature	Operations	Risk	Total
Total	0	10	1	0	11
	0	4	1	0	5
	1	4	1	0	6
	0	2	0	0	2
	0	45	12	1	58
	1	65	15	1	82

* Strangulating PowerPoint status reports 😊

Using proven operational practices for reliable systems

Postmortem Network Outage 26012023 - PRB0040514

Service Incident: Network Outage (Postmortem PRB0040514)

Date: 23.01.2023
Authors: @Julian_Mitros
Status: Draft

Summary
The internet connection, which provides all of internet related services, was fluctuating and partially lost during 1.5 hours.

Impact
The use of different internet services, but only for users staying in KPMG offices, was not made available possible.

Root Cause
DDoS attack on our main Firewall.

Trigger
Very high number of sessions, created by RPTO (monitoring system).

Resolution

- Blocking of suspicious IPs
- Installation of additional security patches on affected firewalls, recommended by Risk-Area
- All numbers, customer names, the like will be removed as well, already communicated to our security team.

Lessons Learned
Better communication and coordination by Problem Management.

What went well
Troubleshooting and coordination with all 3 possible vendors (UPC, KPN/DSL and RPTO vendor).

What went wrong
Information flow to all KPN/DSL users. This should be improved and according DIRT consequences responsible for information flow should be involved from begin.

0 votes in last 30 days

Links
[Dokumente](#) (accessed 10/2)
[Email](#)
[Cloud Adoption Forum](#)
[References](#)
[Announcements](#)
[KPMG Reference Center](#)
[KPMG - Home Virtual Desk](#)
[imprint](#)
[Data Protection - Hub Seite](#)
[Nicht für AGF](#)
[Network Segregation](#)
[Cloud Customer Model](#)
[Country Routing AGF](#)
[Monitoring & Logging L](#)
[Monitoring & Logging R](#)

KPMG

Operational Readiness Review

A

Operational Readiness Review A

Service Level Agreement & Service-Level Objective

Describe the agreed SLA(s)/SLO(s) between Client Service Technology (Advisory domain) and External Service Technology (ServiceLine platform).

Metric definitions

Incident Management

- Availability: **availability_percent** in **minutes** >= **99.9%**
- Response Time is the amount of time a customer first creates a ticket until either the provider responds or lets the client know they are currently working on it.
- Recovery Time is the total amount of time spent in between when the ticket is created till the time the issue is resolved.

Continuity Management

- Recovery Time Objective (RTO) is the targeted duration of time and a service must return to its normal process must be measured after a disruption or under an event or threat to business continuity.
- Recovery Point Objective (RPO) is the maximum acceptable interval during which transactional data is lost from an IT service.

Is this a Service Level Agreement (SLA) between [External Service Technology](#) and [Client Service Technology](#)? The service availability does strongly depend on the underlying platform constraints from [External Service Technology](#). There are no external services integrated, so no external dependencies need to be considered.

There was agreed that:

Operational Time

- The normal service operator: [External Service Technology](#) ([External Service Technology](#)) which defines the availability.

Incident Management

- The overall availability is **99.9%** NOTE: the incident downtime is one day every two weeks (including maintenance downtime). [External Service Technology](#), assume it is not added to [External Service Technology](#) downtime if $(365 \times 2) + 1 = 731$ minutes = 19.2 hours, availability percent = $\frac{731}{731+19.2} = 99.9\%$
- First Level Support via [ServiceDesk](#) (telephone or ticket) SLAs within KPMG End User Service - [ServiceDesk](#) SLAs and is available in normal service operation hours.
- Second Level Support [ServiceDesk](#): not needed.
- Third Level Support [ServiceDesk](#): not needed support in done by External Service Technology operating in accordance to the support levels defined in the SLAs.
- Fourth Level Support: [ServiceDesk](#) SLAs required through 3rd level support.

Continuity Management

- The RTO is 24 hours (including fourth level support)
- The RPO is 24 hours (including fourth level support)

Are the service components ready available?

Ideally, we want to design services which can scale in an order-of-magnitude (i.e., 10x) of their initial initial load. In most cases, a stationary service protocol or load-balancer is expected. For a service made up of multiple microservices, please document the scaling approach for each one.

Consider if there are any connected resources that might cause constraints? Examples include central deployment, DDoS or outliers on external services.

The underlying infrastructure: A capacity management team ensures the cloud is able to support current and reasonably projected future load. The platform runs with more than twice of end-users, in an E500 context it is expected to have a maximum of 20-30k users in the future.

Table of content

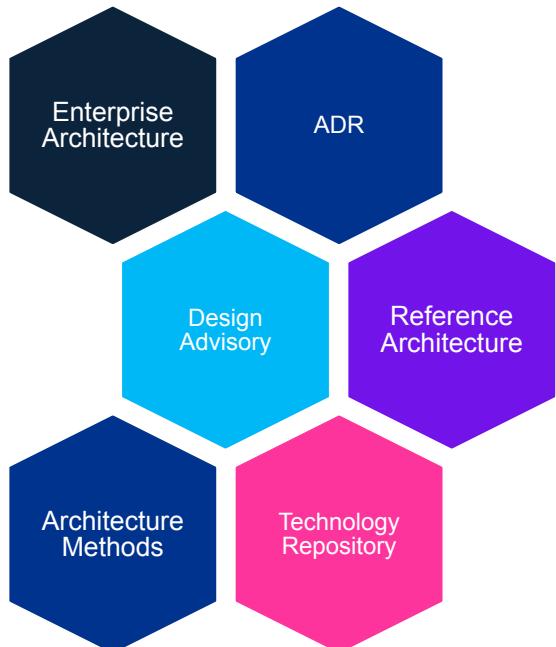
Contents

Preamble	1
Service Definition	2
Architecture & Development	3
Risks and Technical debts	4
Monitoring, Metrics and Alarms	5
Testing	6
Deployment	7
Operations	8
Disaster Recovery	9
Security	10

Operational Readiness Review B

Operational Readiness Review B

Adopting lean, yet disciplined architecture practices



architecture artifacts

P main

Filter pages by title

Architecture Decisions

Business Support Requests

2023/02/07 - What...

2023/01/31 Integr...

2023/01/19 Phases...

2023/01/15 KPIs...

2022/12/12 Asana

Platinum Services

client services

corporate services

enabling services

Data Governance...

2023/09/12 JAH/SC...

2023/02/22 KPMG...

2023/01/07 API Cat...

2023/01/21 BIMU_S...

2022/12/19 API Cat...

enterprise services

2023/04/07 SatPo...

+ New page

20221212 Asana

Jan 22

Asana

- Status: Discussed (20.12.2022)
- Deciders:
- Date: 12.12.2022

Context and Problem Statement

Asana is a pure SaaS work management platform, which happens to be already in use with Markets and HR. Its adoption started before the architecture initiative was initiated, and without an official in-take process.

- to subject it to a proper Technology Intake Assessment (TIA)
- to assess its architectural fit, including its non-functional requirements and security aspects
- to designate proper Technical and Business Owners
- to complete its integration in the Application Landscape, particularly with regard to Identity and Access Management and the Single Sign On functionality

Decision Drivers

- Fulfil compliance obligation related to data retention
- Bring the Identity and Access Management under control
- To keep track of the business application in its CMDB, with clear and official responsibilities

Considered Options

- Microsoft Teams, Microsoft Planner and other services in the same market sector
- Manually managed Identity and Access Management, without integration with the Company's Active Directory SSO

Decision Outcome

- Track Asana as a Business Application available to KPMG personnel
- Grant its use from Managed Devices:
 - For Desktop browsers, this will be guaranteed by the authentication via AAD, which is restricted to the KNet
 - For Mobile devices, since Asana is not yet a Microsoft Intune Protected App, we will start without mobile support. A separate ADR will be issued for the integration with Mobile and VPN.
- Designate a team responsible for the value stream, and make all the necessary resources available (e.g. a DevOps project, a Wiki documentation, related items in ServiceNow)

and... making learning and community development a priority



Architecture Kata - The Road Warrior

The Road Warrior

A major travel agency wants to build the next generation online trip management dashboard to allow travelers to see all of their existing reservations organized by trip either online or through their mobile device.

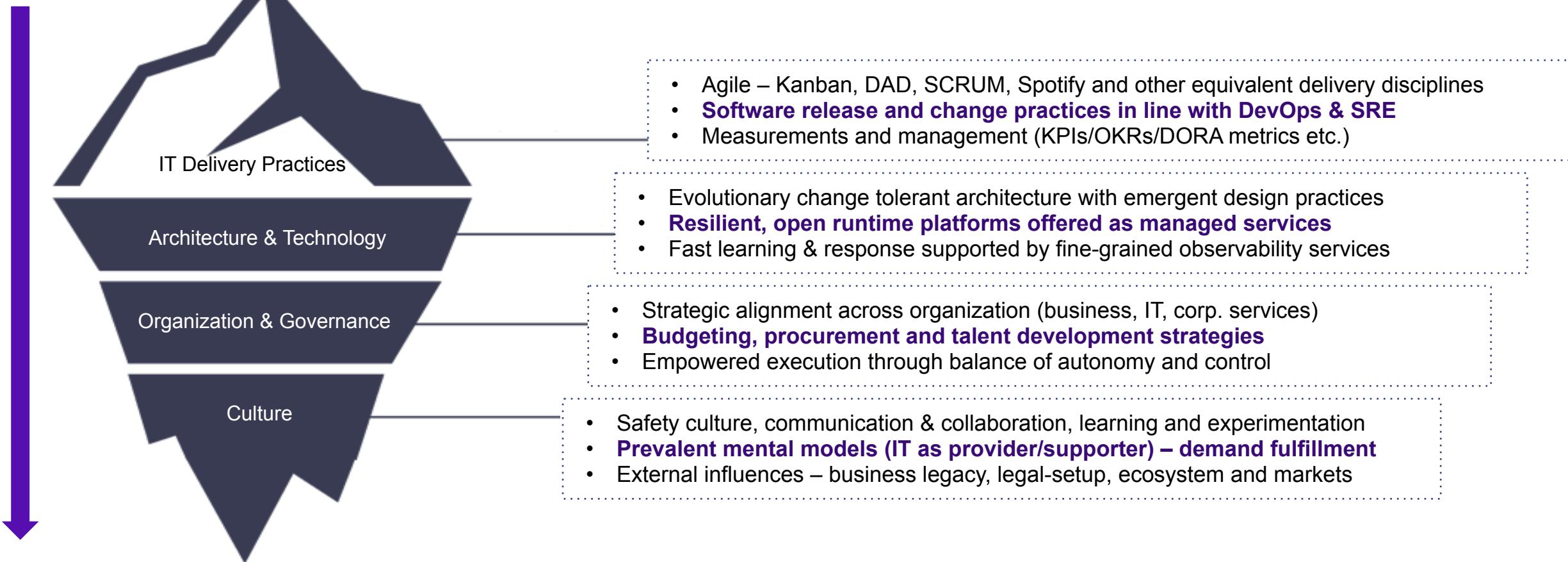
- Users: 10,000+ registered users worldwide
- Requirements:
 - The system must interface with the agency's existing airline, hotel, and car rental interface system to automatically load reservations via frequent flier accounts, hotel point accounts, and car rental rewards accounts.
 - Customers should be able to add existing reservations manually as well.
 - Items in the dashboard should be able to be grouped by trip, and once the trip is complete, the items should automatically be removed from the dashboard.
 - Users should also be able to share their trip information by interfacing with standard social media sites.
 - Richest user interface possible across all deployment platforms.
- Additional Context:
 - must integrate seamlessly with existing travel systems
 - partnership deals are being negotiated to create 'favored' vendors
 - must work internationally

The screenshot shows a digital platform interface with several sections:

- Top Left:** A sidebar with links: Gupta, Dinkar; Home feed; Communities; Storylines; Inbox.
- Top Center:** A banner for 'KPMG Tech X change' with a 'Join' button.
- Top Right:** A sidebar with links: Gupta, Dinkar; Home feed; Communities; Storylines; Inbox.
- Middle Left:** A 'Favorites' section with 'CH - TechXchange' highlighted.
- Middle Center:** A 'CH - TechXchange' page with tabs: Conversations, About, Files, Events.
- Middle Right:** A 'My communities' section listing: GO - Yammer, DE - ITS Power Platform C..., CH - Digital Workplace, CH - Swiss Pilot Community.
- Bottom Left:** A post by Gupta, Dinkar: "Absolutely well written and must read for all. We must ensure a security first mindset. G Compliance posture is a byproduct." with a link to <https://ventureinsecurity.net/p/the-importance-of-adopting-a-security-first-mindset/>.
- Bottom Right:** A post by John, Sheba Annie: "Thought of sharing the 3 ways of DevOps as mentioned in the book Phoenix Project (<https://www.amazon.in/Phoenix-Project-DevOps-Helping-Business-...>). Read more about this here <https://trevolution.com/articles/the-three-ways-principles-...>, and if you get a chance please read the book as well - would be a great relatable experience!"
- Bottom Center:** A diagram titled 'The First Way: Systems Thinking' showing a flow from Business to Dev to Ops.
- Bottom Right:** A diagram titled 'The Three Ways: The Principles Underpinning DevOps' by Gene Kim, showing three iterative loops: Amplify Feedback Loops, The Second Way, and The Third Way: Culture Of Continual Experimentation And Learning.



However! Recomposition requires us to dig deeper



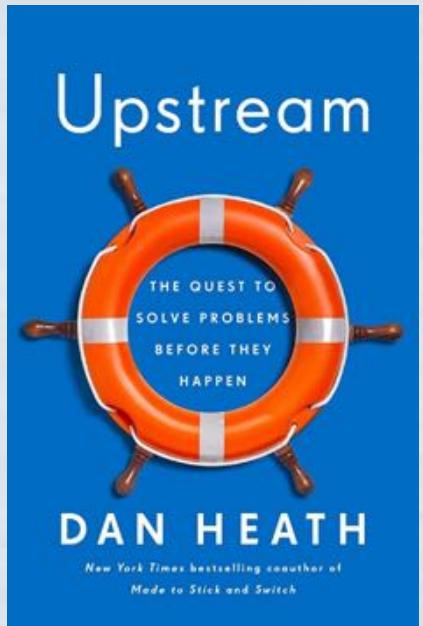
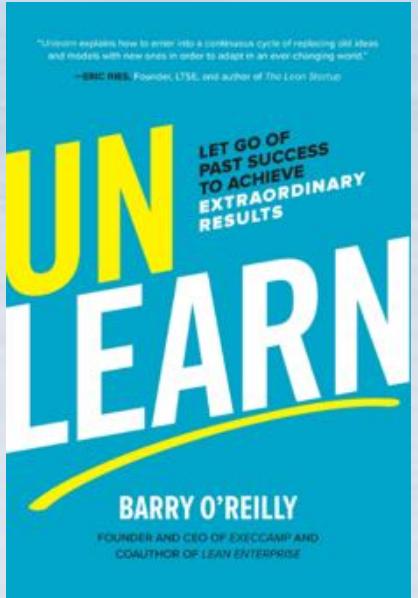
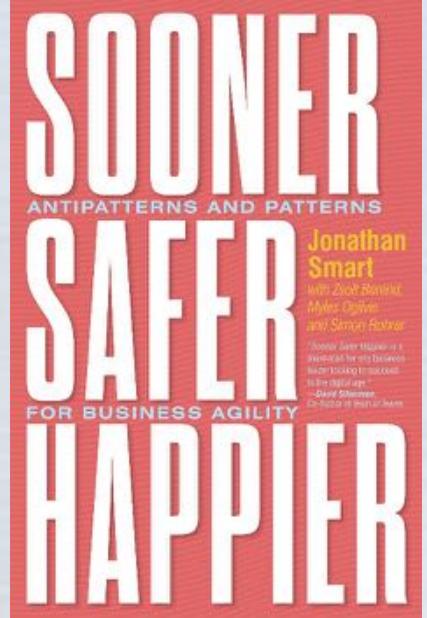
Learnings for us (and fellow followers)

- » Don't lose sight of enterprise realities in your DevOps journey (e.g. ITSM, EUC, GRC, Sourcing etc.)
- » Play close attention to learning anxieties and cognitive overload of your colleagues
- » Be ready to modulate your pace to suite the business cadence
- » Make technical debt and operational risk management an explicit priority
- » With uncontrolled autonomy, comes unmanageable complexity – don't undervalue governance
- » Language is Leadership, change the language, change the culture

Delivery changes

Patience & perseverance

Daring to go ?



We will be grateful for ...

Connect and Reflect

With fellow travellers in this quest across industries



<https://www.linkedin.com/in/marceloancelmo/>



<https://www.linkedin.com/in/dinkargupta/>



Experience of applying devops engineering practices in “not-entirely-dev-shop” scenarios

With specifics in domains of risk & compliance, SaaS & COTS, workplace technology, no code/low code platforms etc..

Battle stories from adoption of product orientation in service industry

While there is work through #projecttoproducts, #bvssh and #vsmconsortium, dialog here will help the “middle-class” at large

Your valuable feedback for us, the #DOES #newbies

We intent to come back with more learning and stories once again, help us improve!

“

Coming together is a
beginning.
Keeping together is
progress.
Working together is success.

Henry Ford

@dinkargupta @marceloancelmo

#daretodo #sustainablebusinessagility #togetherforbetter