

Digital capabilities management model

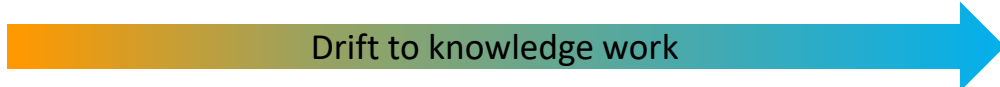
Why DCMM
What is DCMM

Zdenek Kvapil
Jonathan Boyd



Paradigm shift of IT management

Paradigm →	Industrial Era - ITSM, Agile, DevOps, LEAN, 6Sigma, VSM, Scrum	Knowledge Era - DCMM, SFIA, ISO 44001, 56002, ...
Underlying logic	Traditional Samuelson economy, Porter value chain, consistent and efficient processes as a source of value, elimination of waste, quantitative management	Information theory, new economy CORE ECON, complex systems, collaboration networks, value from knowledge, innovation & automation of routine work
Analogy	Organization is a machine, input → output processing	Organization is an organism self improving its capabilities
IT role	Service/Product provider to the business who is approached as a customer	Capability, IT is an integral part of the business
IT work	Predefined processes, streams, workflows, variability is negative, decision making externalized	Knowledge work, dynamic clusters of interrelated activities, variability is normal, largely autonomous
Management objectives	Productivity, efficiency, speed, SLAs, KPIs, velocity, waste reduction, time to market	Quality, collaboration potential, innovativeness, resilience, organization capabilities
IT driving force	Demand from customers triggers IT activities	Improvements and innovation of business capabilities
Information and feedback	Information is available any time at zero costs, feedback information is always correct, existence of external all-knowing instance (customer, stakeholder)	Information is a result of activity, costs are incurred, information is usually incomplete, non-verifiable and asymmetric, feedback is frequently delayed or missing
Decision making	Customer's responsibility or zero cost activity, decision making happens instantly when required	Consuming resources (time), complex analysis, additional info can be required, effects of decisions are opaque
Future	Predictable: $y = f(x)$	Non-predictable: $y_{n+1} = f(y_n, x, z, ..)$, path dependence
IT is perceived as	A cost, IT costs should be below competition	An asset, IT should be sufficiently funded



Why DCMM

Unresolved challenges in actual models:

- IT is a knowledge work – complex, changing
- What is IT doing? Why IT exists?
- Role of IT in digital transformation
- IT and exploration, innovation and collaboration
- Incomplete information, uncertainty, non linear future
- Visual management

New trends and thinking advances

- New economy paradigm - CORE
<https://voxeu.org/article/new-paradigm-introductory-course-economics>
Information is unverifiable, contract management is costly ...
- AI, ML, autonomous systems, Tesla, Alexa, AWS, Azure
- “The End of Agile“ via [Forbes](#)
- Complex systems, Information theory, Collaboration network
- Old models are driven by proven myths
“5 Busted Myths About Workplace Effectiveness” - The more work employees have, the more effective they can be
- Beyond Budgeting – challenging traditional budgeting [practices](#)

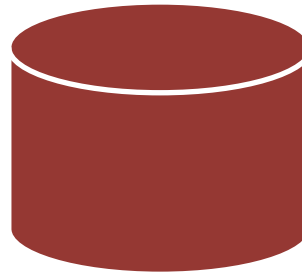
Managing IT as if the last 2 decades didn't happen?

- Two main groups of IT governance models
- Widely used by millions of organizations
- Is there any innovation in the last decade?



ITSM - ITIL, ISO 20000,
IT4IT, VeriSM, Trim

Appeared 1990 and later



Scrum, Agile, SAFe, DevOps

Appeared 1993, 2001, ...



Digital capabilities
management DCMM

2019

Methods and Contexts characteristics

Method/Model	Context	Roots	Objectives
LEAN, Kanban VSM, 6Sigma	Repeated processes Closed systems	Production	Increased productivity Efficiency, throughput
ITSM, ITIL, ISO2000	Service provisioning	Service industry	Cost efficiency Meeting requirements
Agile, DevOps, Scrum	Engineering Product development	SW development	Time-to-market Meeting requirements
Digital capabilities management DCMM	Knowledge work Complex adaptive systems Collaboration	Information era	Exploration & Innovation Competitiveness Collaborativeness

Knowledge work characteristics is demanding different approach than previously used methods.

From services & products to digital capabilities

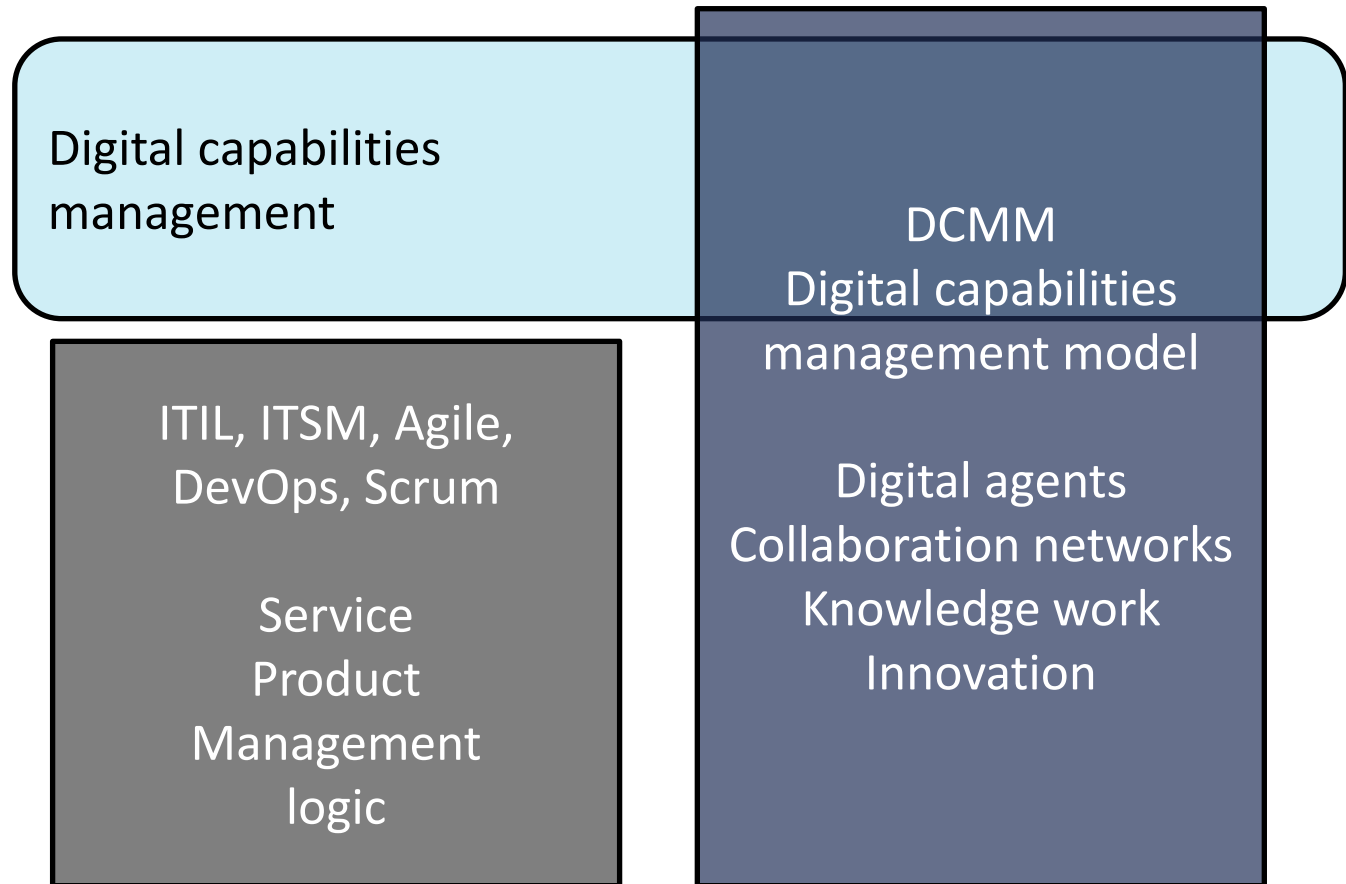


Key Management Practice	Managed Strategy
APO02.01 Understand enterprise context and direction.	
APO02.02 Assess current capabilities, performance and digital maturity of the enterprise.	
APO02.03 Define target digital capabilities.	
APO02.04 Conduct a gap analysis.	
APO02.05 Define the strategic plan and road map.	
APO02.06 Communicate the I&T strategy and direction.	
Related Guidance (Standards, Frameworks, Compliance Requirements)	
Detail	

Deloitte.

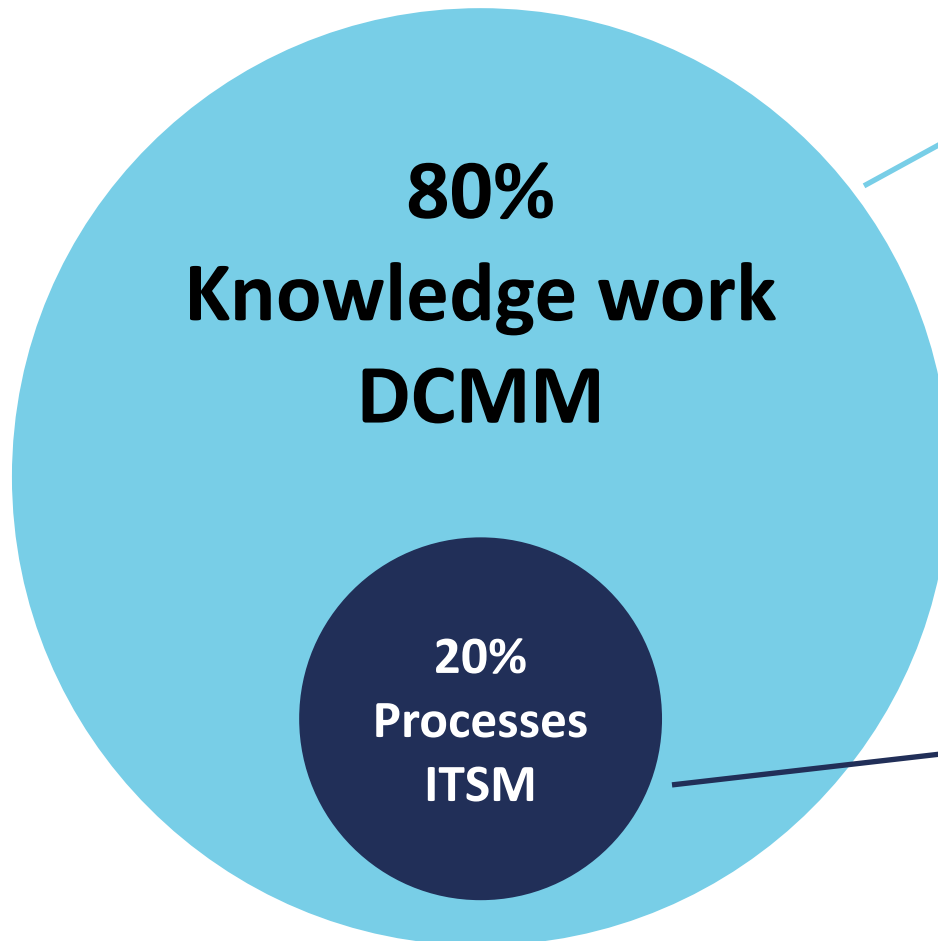
What you need to know about digital capabilities

Digital capabilities management



Digital capabilities means organization level perspective which is a result of cross organization collaboration and collaboration with partners – combination of skills, knowledge, knowhow, experience, technology, data, algorithms. Product or service logic represents IT level perspective.

What is IT doing?



Knowledge work:

Information processing, analysis, pattern recognition, target definition, exploration, innovation, dynamic clusters of interconnected activities = complex stories, unpredictable, non-linear, complex systems, learning and unlearning, probability based decision making

Mental model: IT as a neural system, IT as a capability function

Models and methods: DCMM, RBA, ADRA

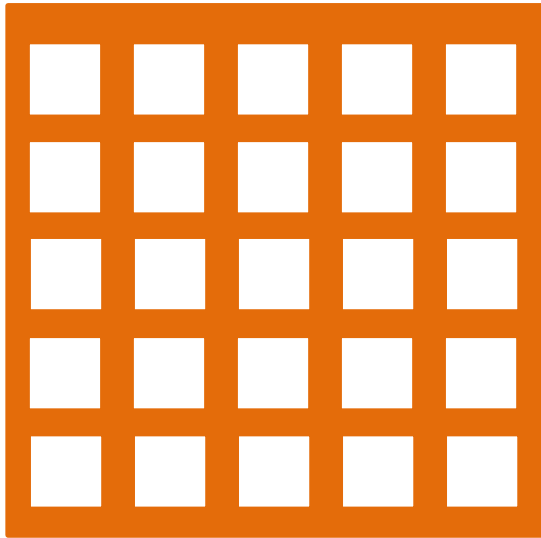
Processes, streams, workflows:

Demand driven, rule-based, algorithmic, performance, productivity, speed, waste, delays, output and outcome, linear, predictable, KPI, SLA

Mental model: IT as a factory, industrial era logic.

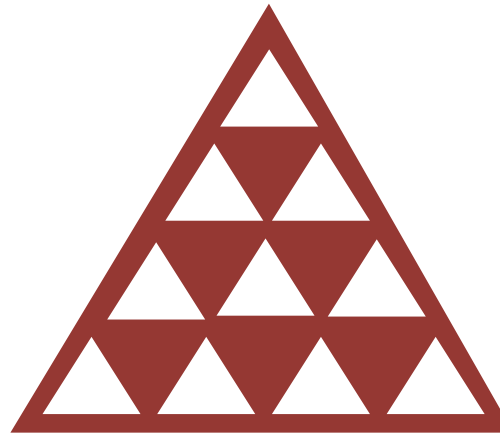
Models and methods: ITSM, ...SM, LEAN, Kanban, VSM, Kaizen

Patterns create the big picture of IT



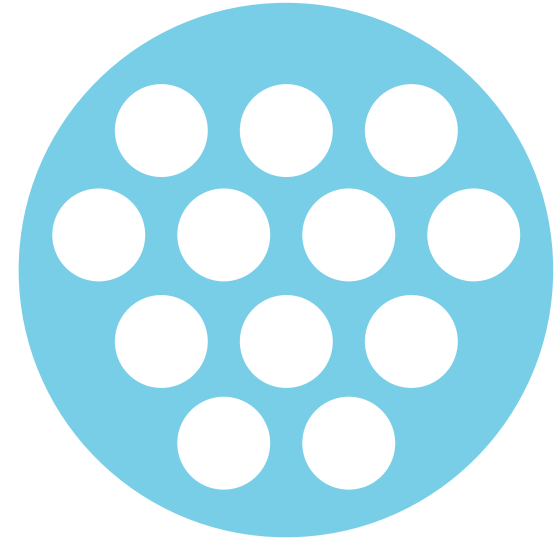
Service
Customer
Service provider
Requirements
SLA

IT is a service provider
ITSM



Agile
Product
Sprint
Feedback
Velocity

IT is a software development
Agile



Capability
Organization
Collaboration
Innovation
Adaptations

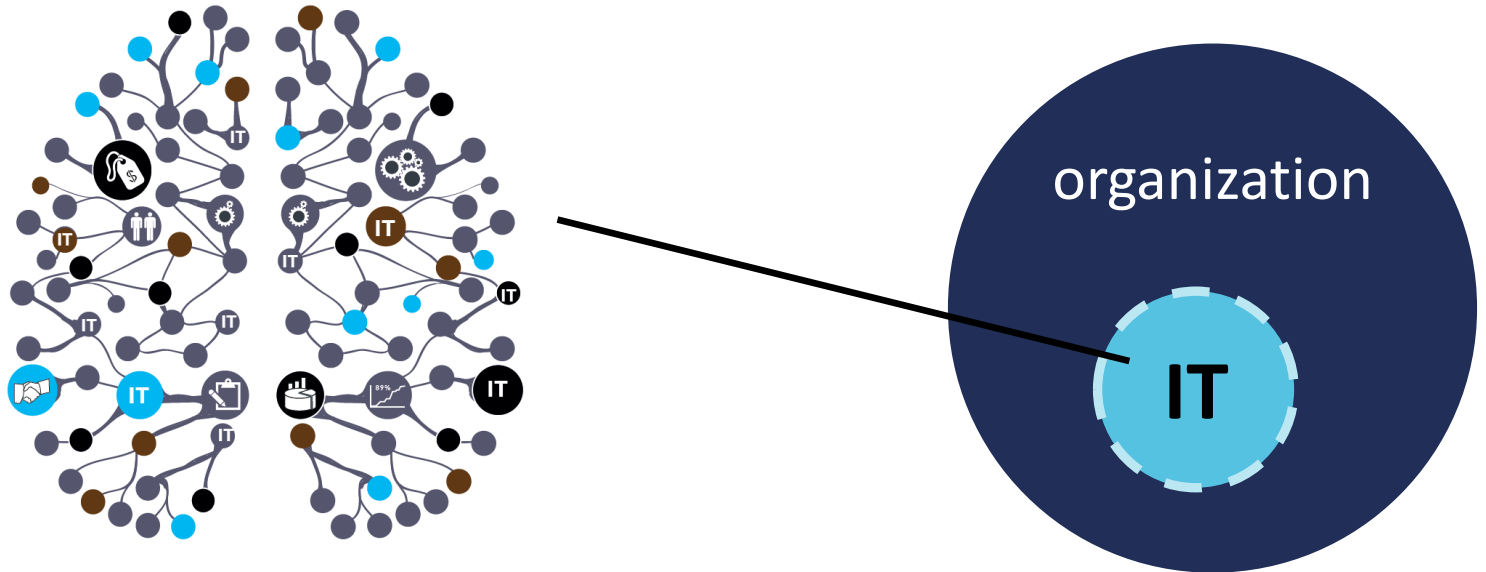
IT is a capability function
DCMM

Aristotle: "We are what we repeatedly do."

IT is a neural system of its organisation

Being inside has consequences

- word “relationship” or “partner” is not suitable
- we can't separate ourselves from our neural system



Why DCMM

SERVICES

External service providers

- Economy fundamentals, Service Management processes and practices
- Customer receiving services meeting requirements
- Administration overhead required due to underpinning financial transactions
- Providing services to B and C

Example: ITIL, ISO/IEC 20000, IT4IT, TRIM, VeriSM, FitSM, COBIT, SIAM

A

PRODUCTS

Software development

- Software development per customer requirements
- Iterative development and fast feedback loop
- Customer focused
- Software products development for A and C

Example: Agile, Scrum, DevOps, Continuous Delivery

B

DIGITAL CAPABILITIES

Internal IT / CIO

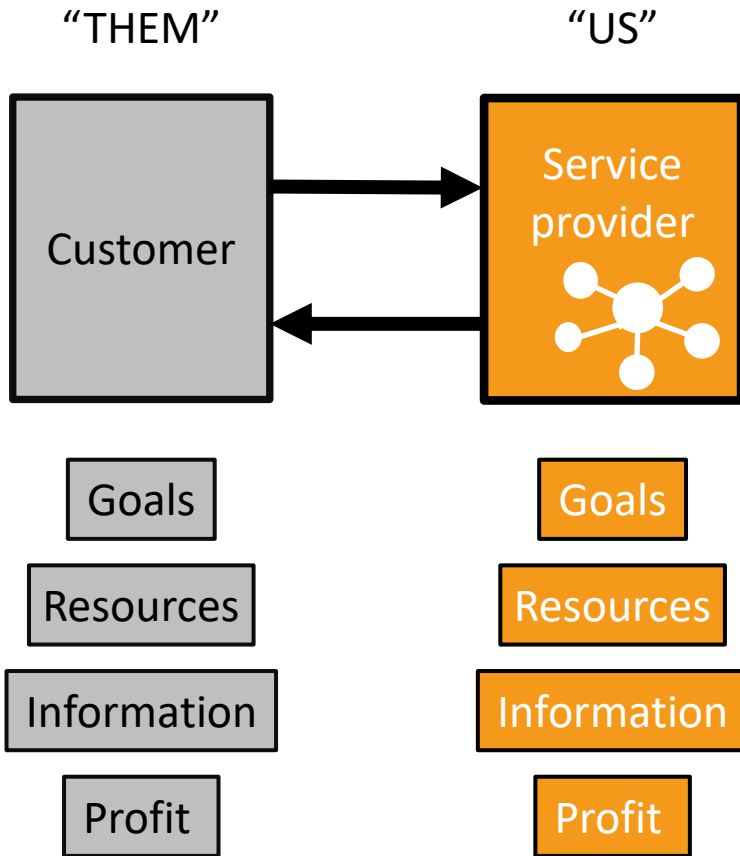
- Managing digital capabilities of the whole organisation
- Strategic role in digital transformation
- Adaptivity, exploration and innovation
- Digital ecosystems, resilience, accepting uncertainty and missing information
- Minimizing self-administration overhead
- Autonomy, self-improvements, collaboration across departments and with external partners
- Purchasing products and services from A and B

Example: DCMM, ISO/IEC 44001, BRM

C

Service provisioning Vs. Collaboration

Service/Product provisioning

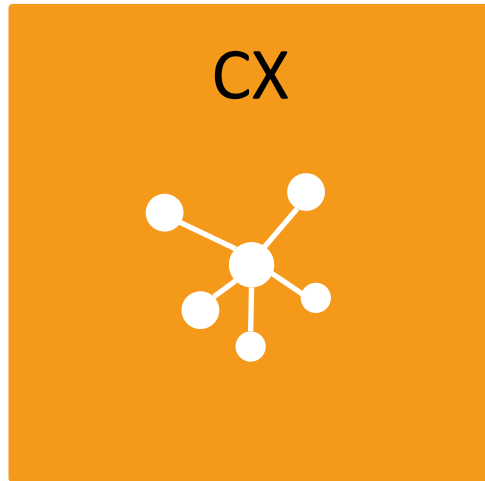


Collaboration



Shared purpose, goals, governance, information, knowledge, resources, risks

Customer and Collaboration experience



ITSM

Customer experience #CX

How services are perceived by customers
Asymmetric, not reflecting customer
behaviour
One-to-many relationship



DCMM

Collaboration experience #CLX and Collaboration quality #CLQ

Mutual collaborators' perception
Many-to-many relationship

DCMM : Digital Capabilities Management Model Masterclass

“Navigate your organization through digital transformation with a modern, radically new IT management model, driven by collaboration, adaptability and energy efficiency”



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DCMM

Sources of inspiration

- Complex adaptive systems – uncertainty, probability
- CORE ECON
- Collaboration, family, sport, biology, brain, ecosystems
- Convergence of computer sciences and biology – AI, ML
- Information theory
- Innovation ecosystems, platforms, digital ecosystems
- How progressive CIOs already manage their ITs.

Digital Capabilities Management Model

Principles

1. Sharing

2. Self-motivation

3. Uncertainty

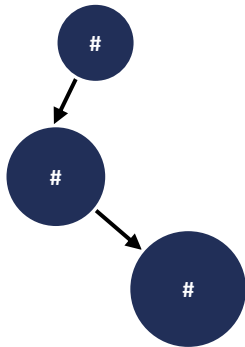
4. Adaptations

5. Fairness

Techniques:
CVC
ADRA
RBA



Stories



Activity

New component
NC

Improvement
IM

Normal status
NS

Extension
EX

Check
CK

Modification
MO

Reduction
RD

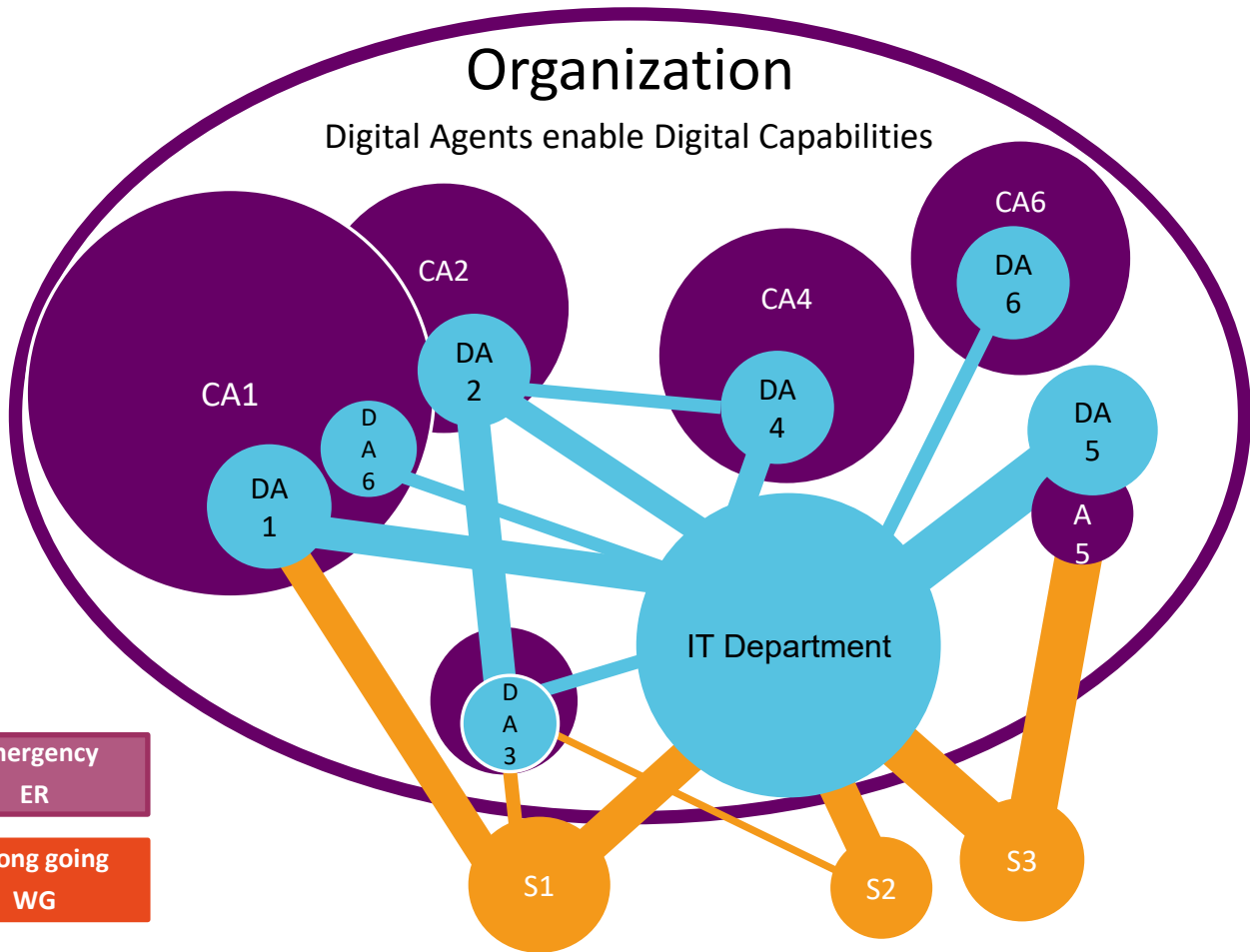
Recovery
RC

Emergency
ER

Wrong going
WG

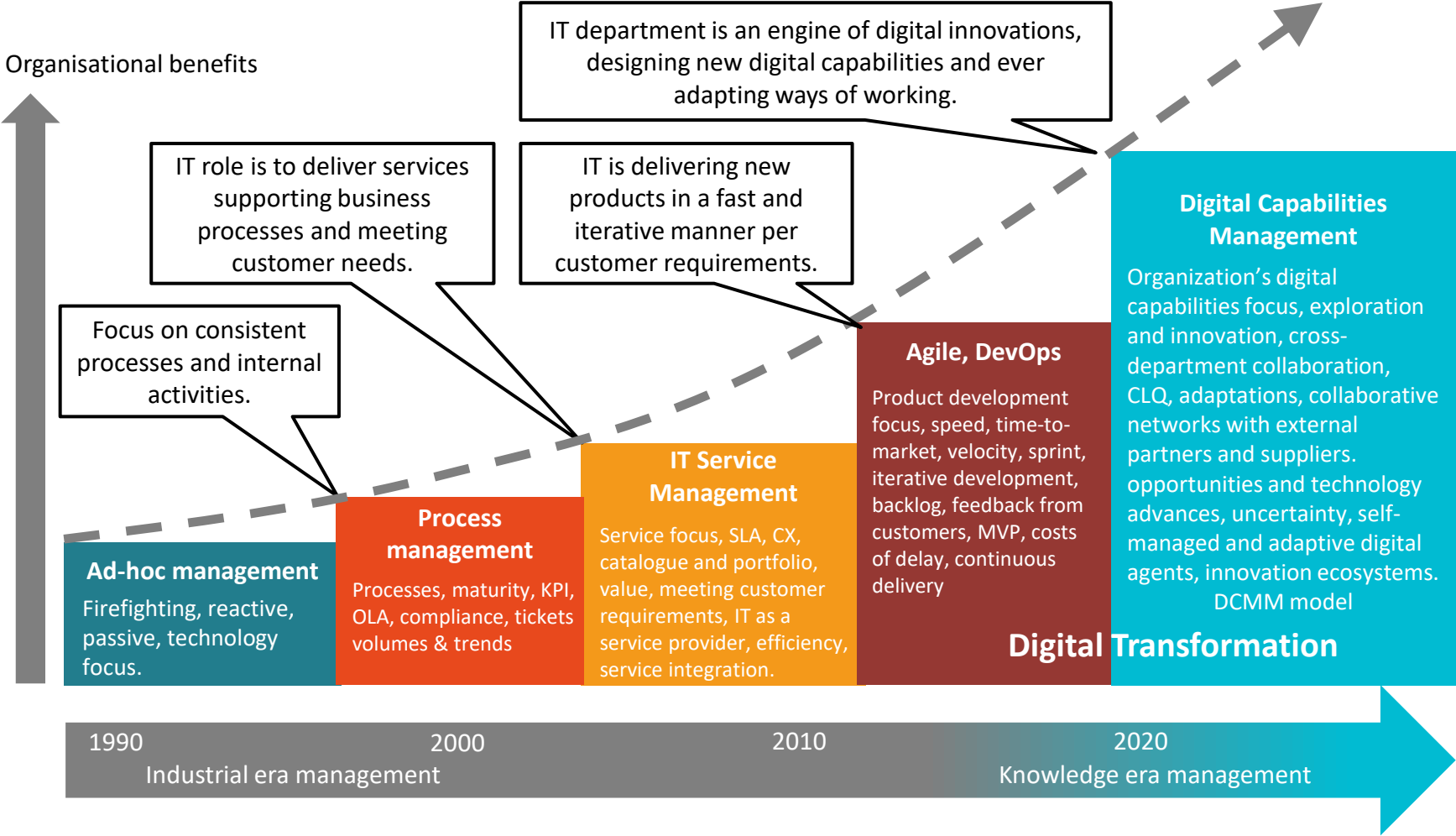
Organization

Digital Agents enable Digital Capabilities

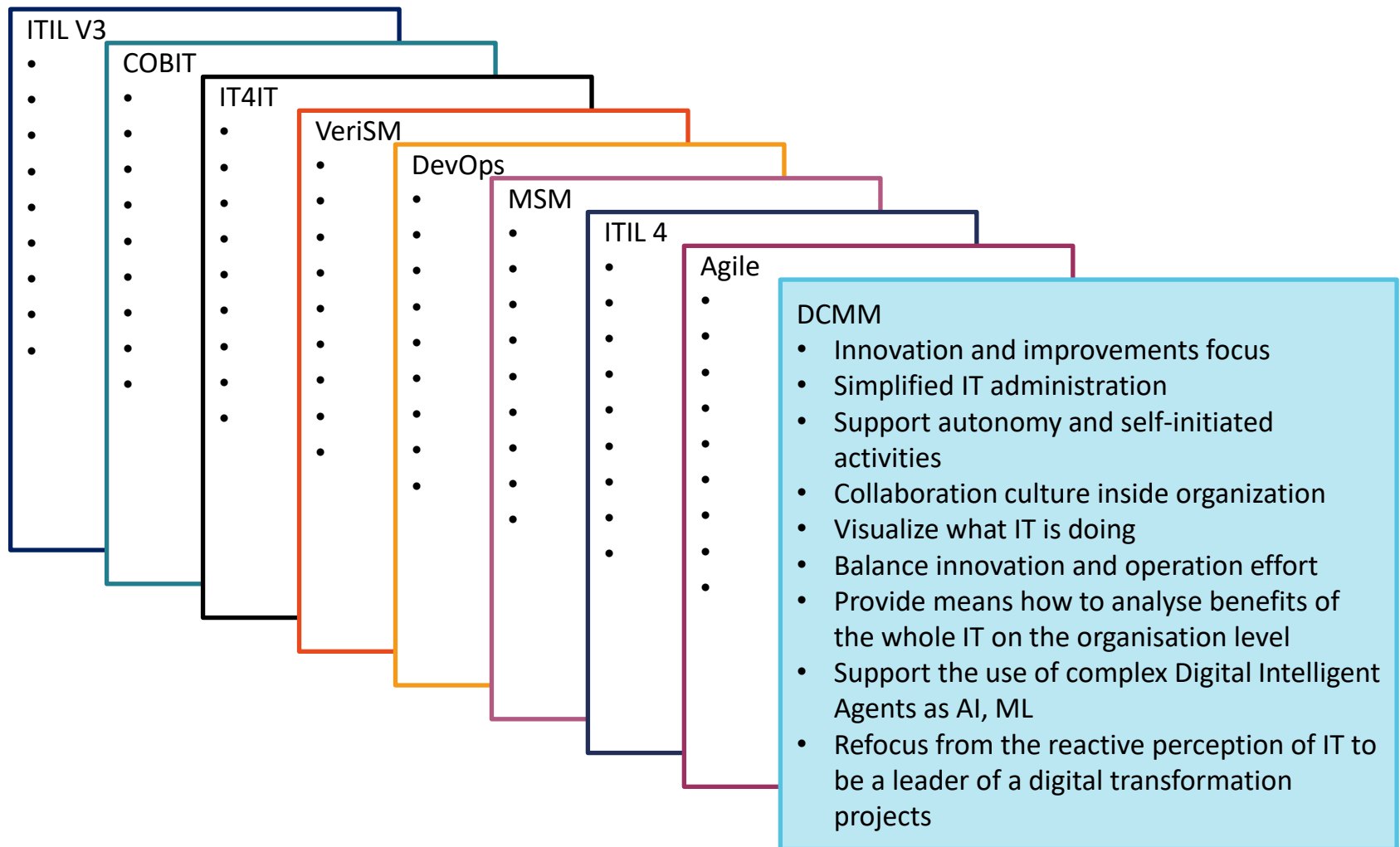


DCMM is the next generation model

Development stages of IT management models



How to choose your management model?



Body of knowledge



Ebnak Kagal, Author and DCM architect
"The new rapid emergence of a variety of IT management models, frameworks, practices. Most of them are just reiterations of old ideas. At certain points, the reworked reworked ideas do come. However, with the new complete reworked IT departments, DCM is that type of progressive, innovative organization that service providers, they are integrating digital capabilities, where they are integrating of acting, unknown future and accept risk of which could be only reassured on the whole organization levels."



Jonathan Boyd, Co-author and editor
"For nearly 30 year, the thinking behind IT management has remained unchanged, we have improved tools and software and called it IT. We have been basically under one of the challenges that our consumer behavior would bring. Business need to be dynamic and support change as a dynamic part of success. Evolution has perfected change, continuous improvement. Now we truly have a B and one model that enables it."

DCM
DIGITAL CAPABILITIES MANAGEMENT MODEL

DIGITAL CAPABILITIES MANAGEMENT MODEL
Navigate your organization through digital transformation with a modern, radically new IT management model, driven by collaboration, adaptability, and minimized management overhead.



DCMM : Digital Capabilities Management Model – trainings structure

Course	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9
DCMM Masterclass	CDCM								
DCMM Professional		CDCP							
DCMM Manager				CDCMG					
DCMM Expert	CDCE								
Innovation Management in IT						CIMIT			
Digital Transformation for CIO							CDTC		
Digital IT Strategy								CDITS	
Information theory for IT practitioners									CITIP

Opportunity introduced by DCMM

- Help CIOs to reposition IT from acting as a service provider to organisation's digital capability capable to innovate and explore new opportunities
- Decrease administration overhead of IT management
- Increase innovation potential of the organisations

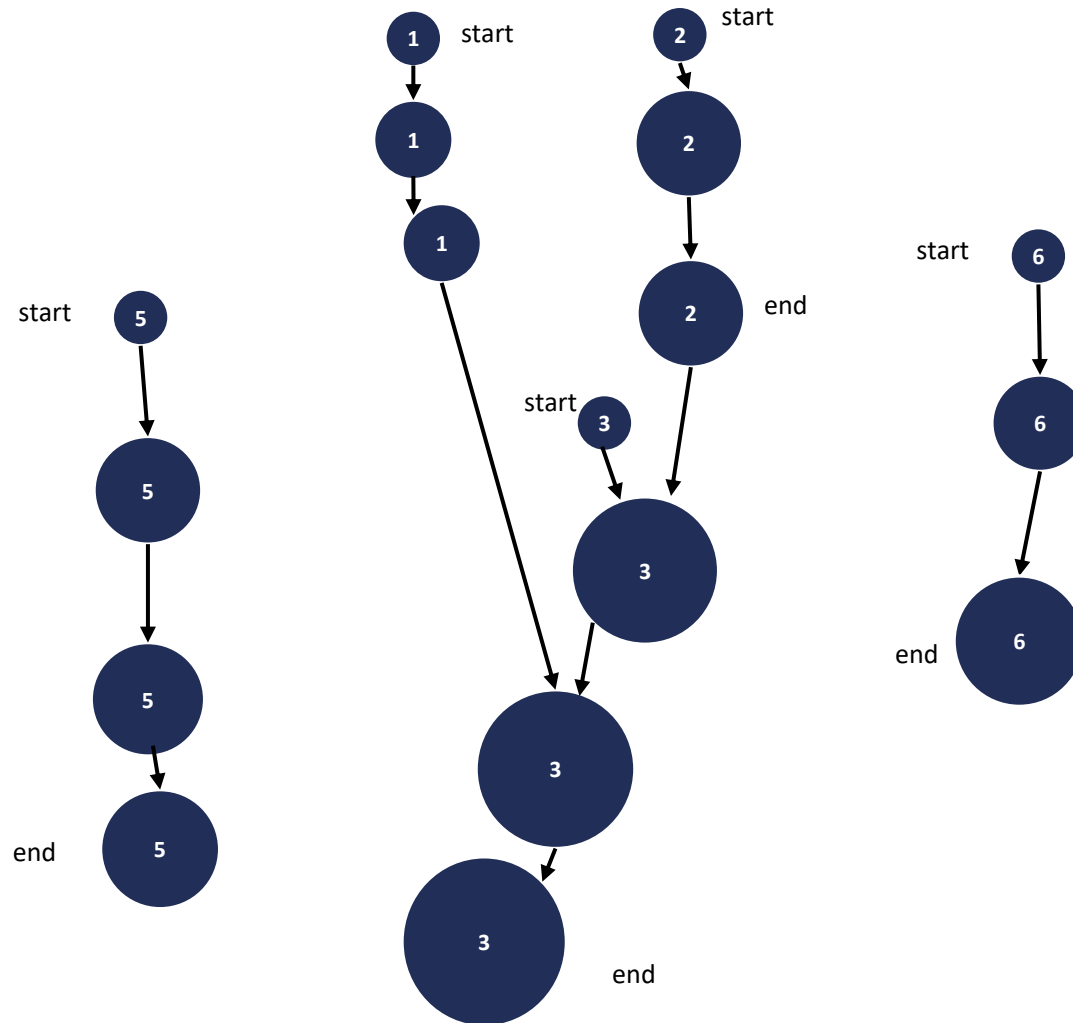
DCMM benefits
35% IT innovation capability increase
30% administrative overhead decrease
38% IT personnel satisfaction increase
24% IT quality perception increase of non IT people

Partners

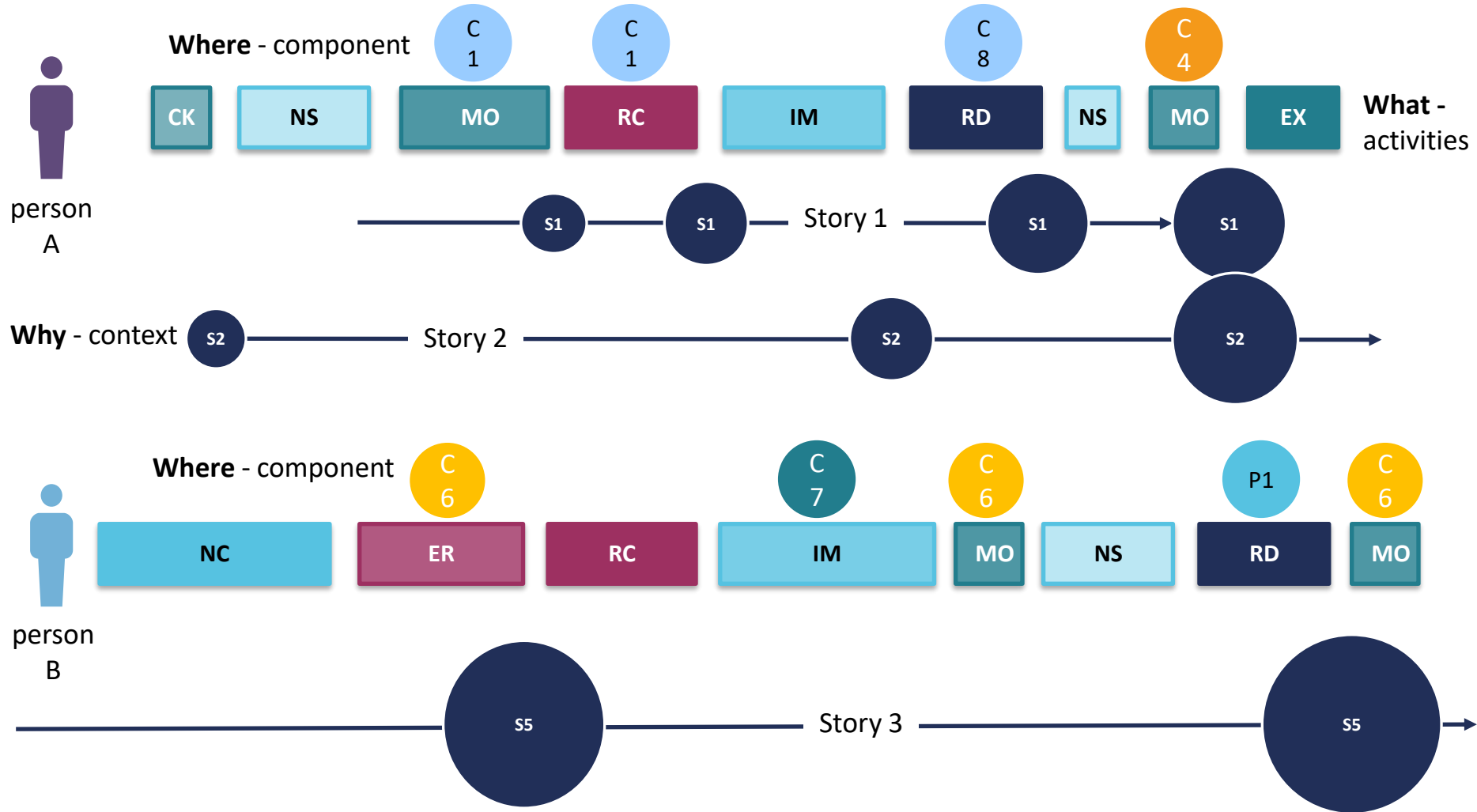
- Deliver consultancy using shared templates
 - DCMM feasibility study
 - DCMM project charter
 - Slide decks
- Deliver trainings – Masterclass, Professional, Manager, Expert
- Become CIO adviser with an innovative approach to IT management, supporting CIO in digital transformation.

Thank you.

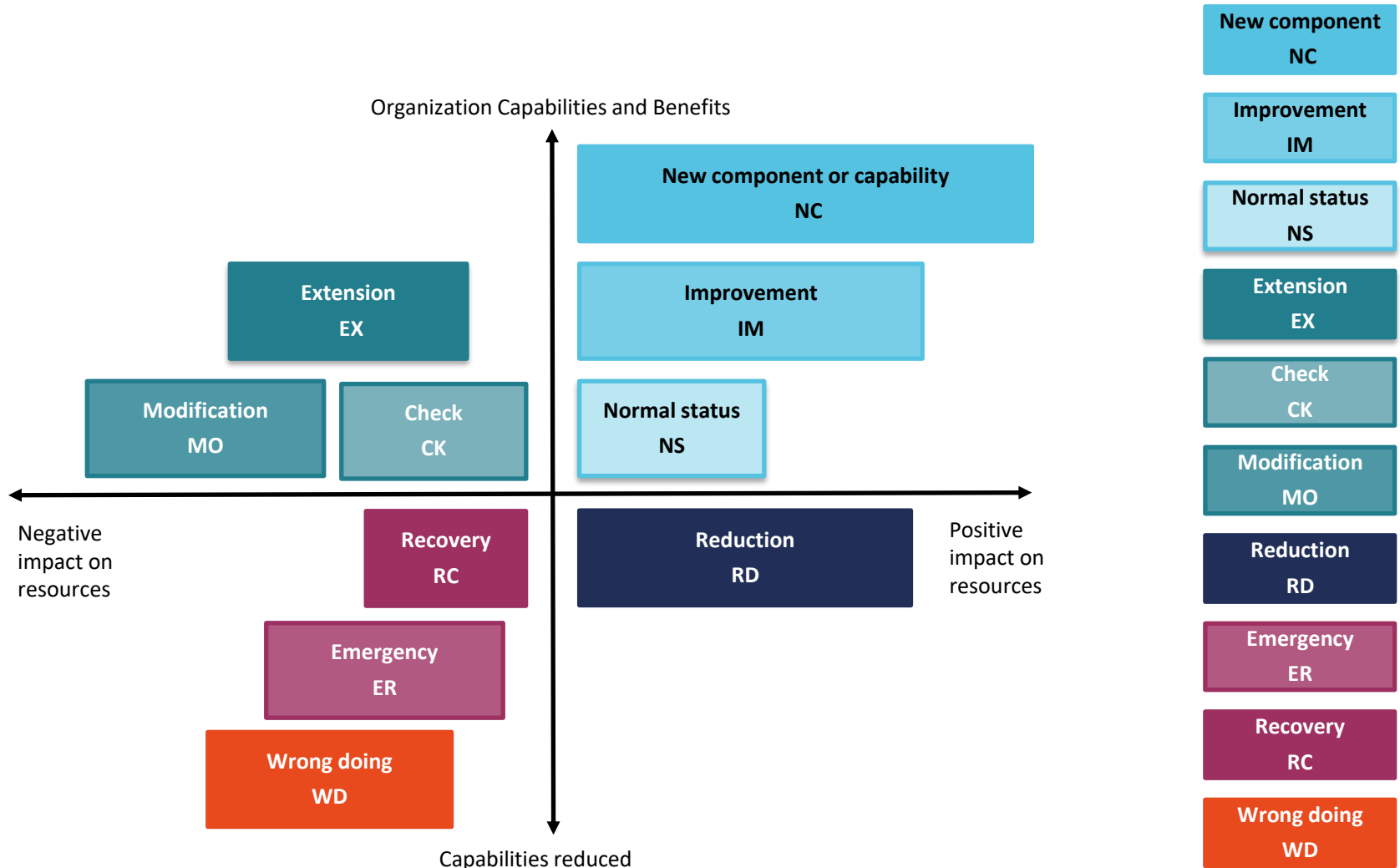
Stories are what happens every day in IT



Visual board : 3W – What, Where, Why



Capability / Resources / Activities time bounded impact



Activities have different characteristics

