



PV207 – BPM & SOA

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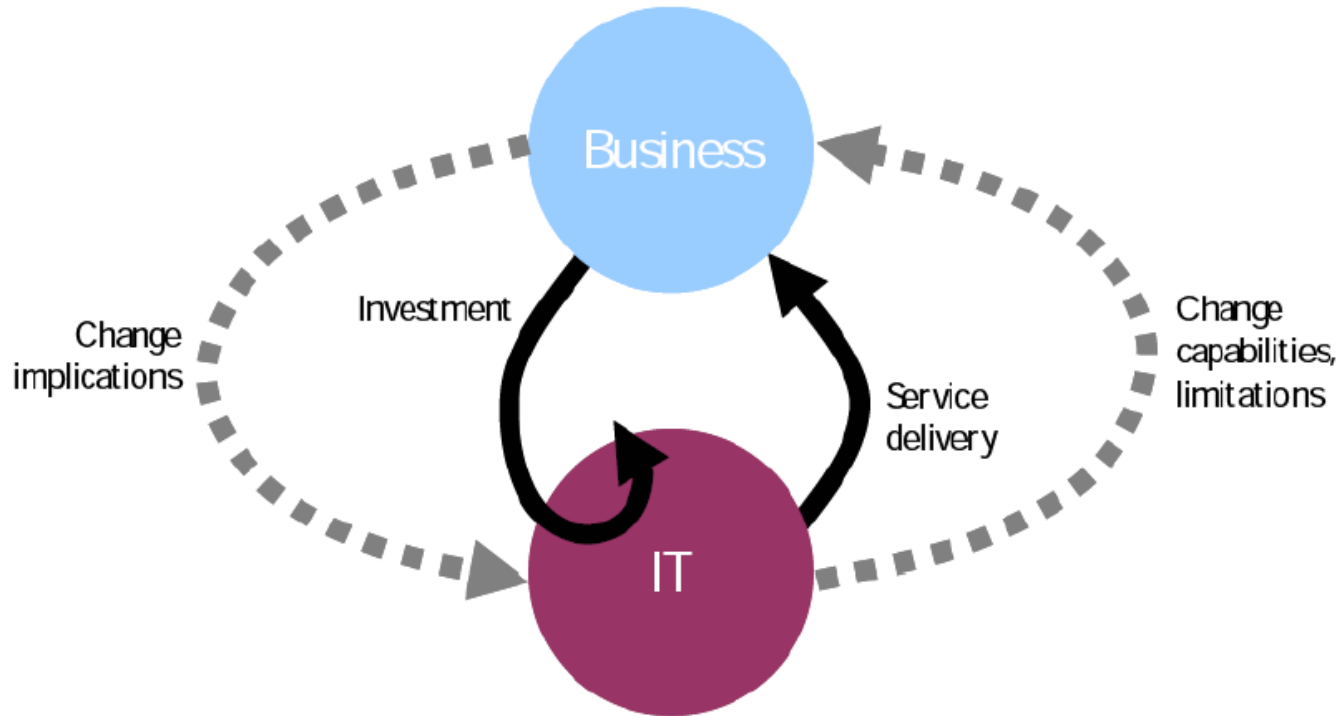
28.2.2011

Obsah

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- Vztah BPM a SOA
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- SOA Governance
- SOMA
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- Kam na SOA

Motivace

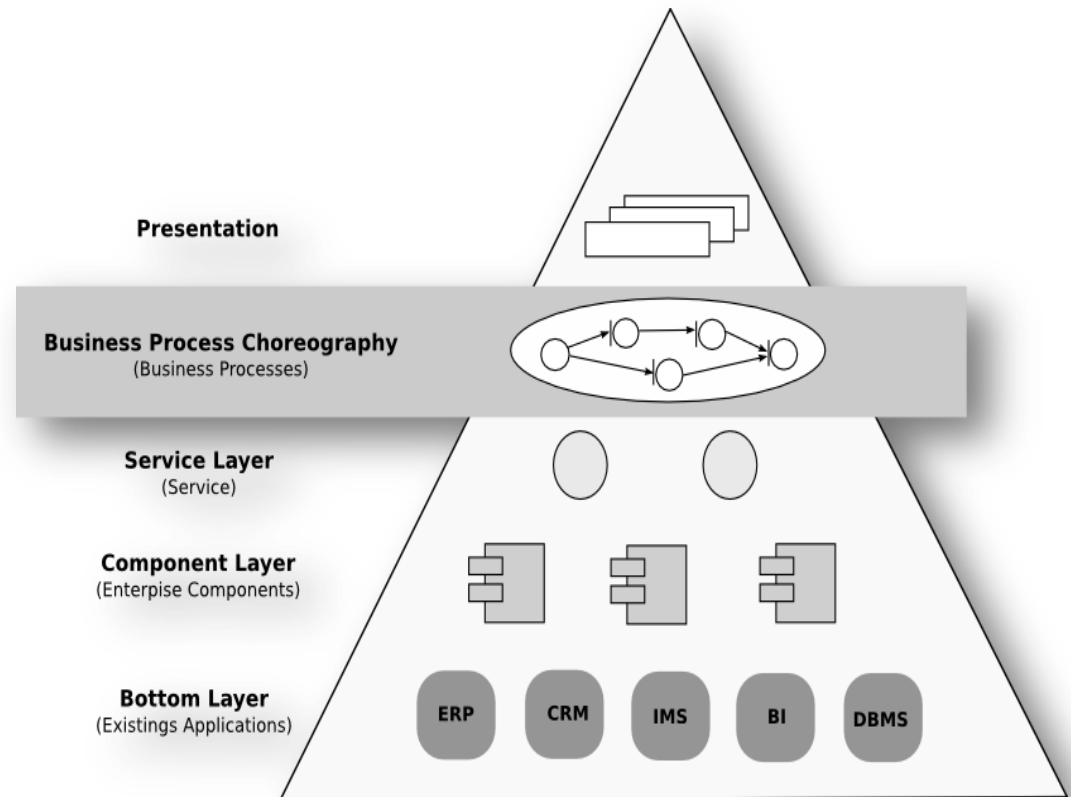
Figure 1: The elements of IT-business alignment



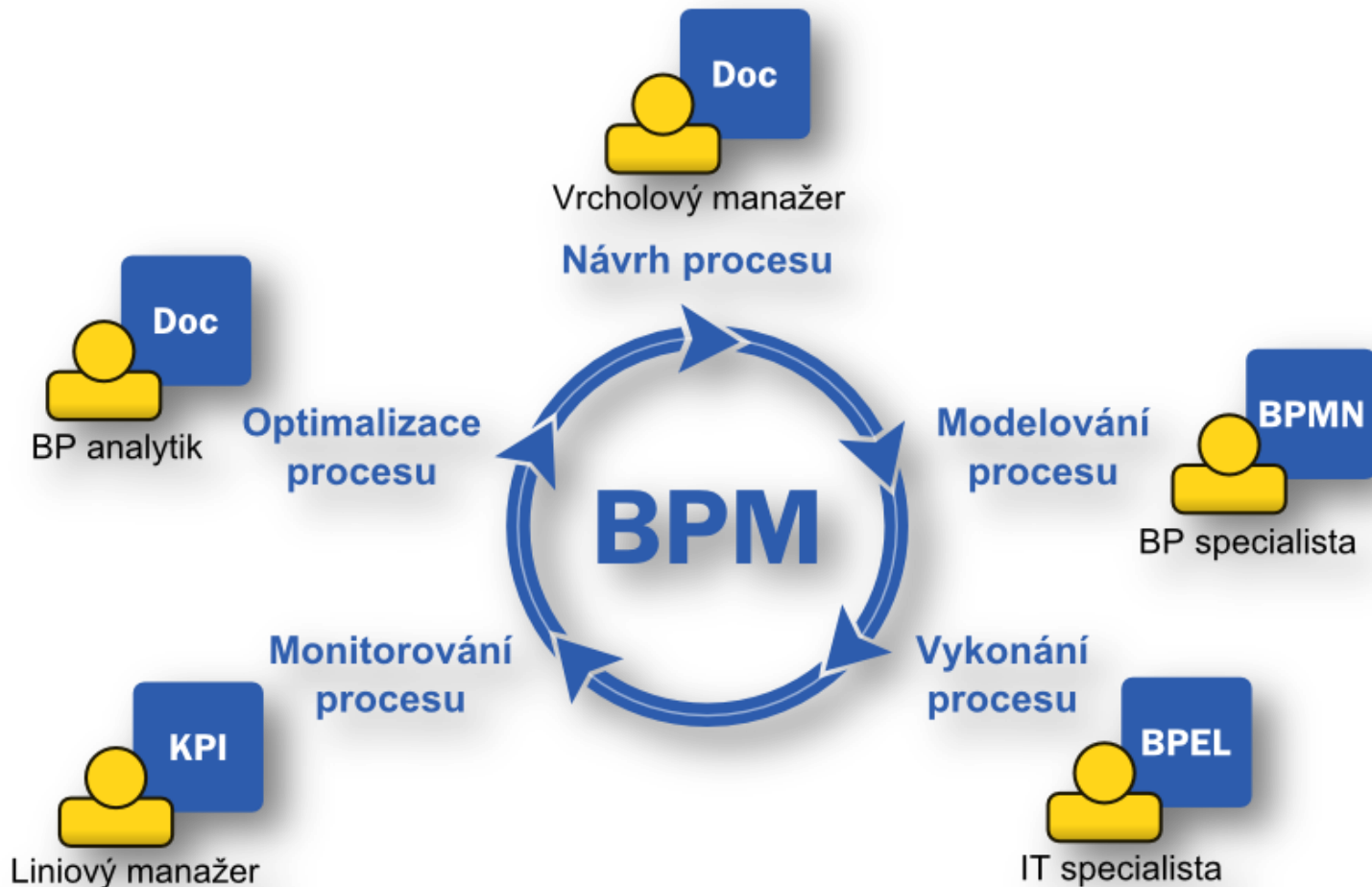
There are three important elements in IT-business alignment: investment, service delivery, and collaboration in change management.

Role BPM v IT managementu

- Ze shoda je definováno požadavky businessu
- Ze spodu využívá služeb IT

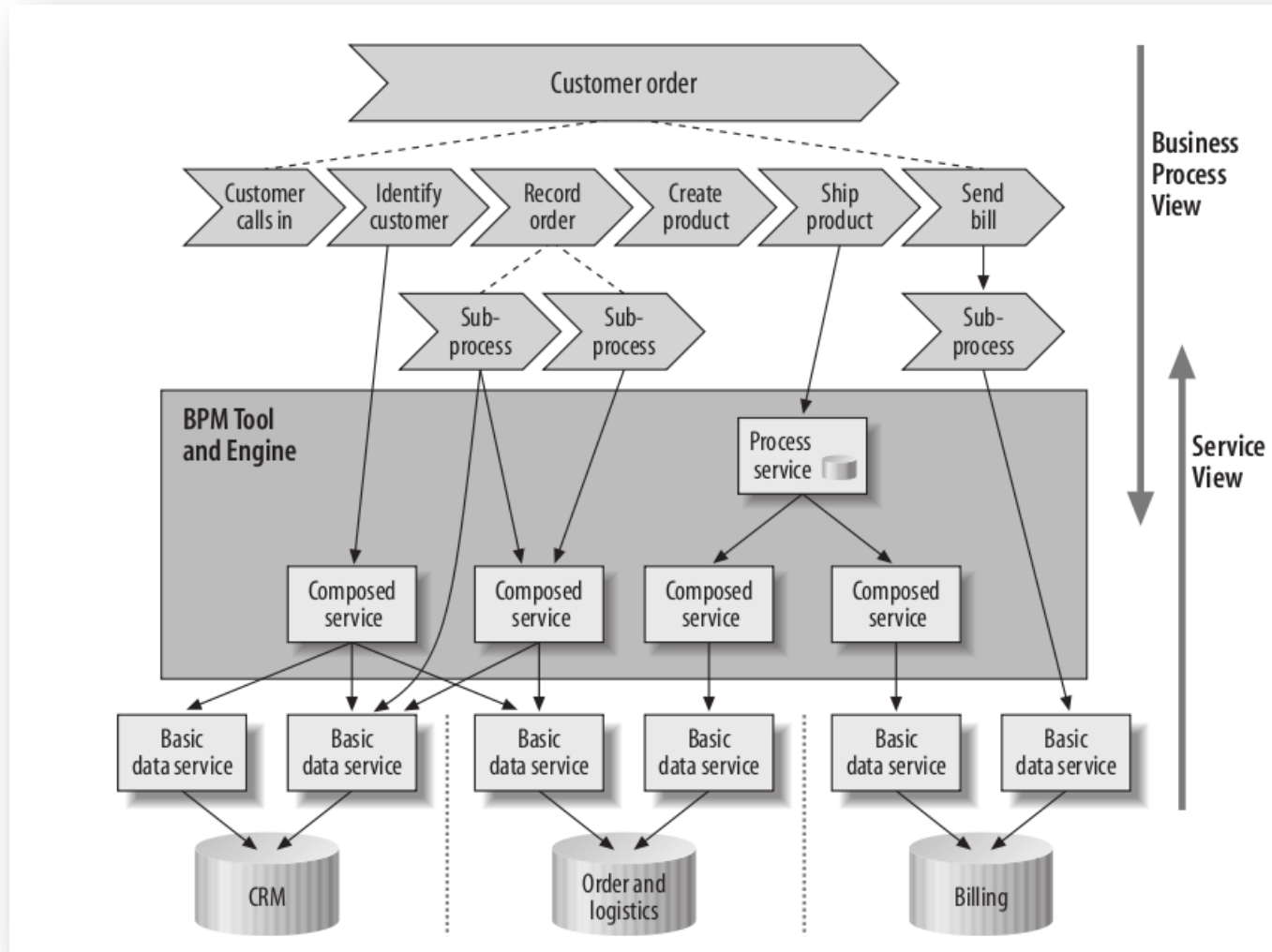


Životní cyklus BPM



J. Pavlovič, P. Vašíček, IBA CZ, 2008

Vztah BPM a SOA



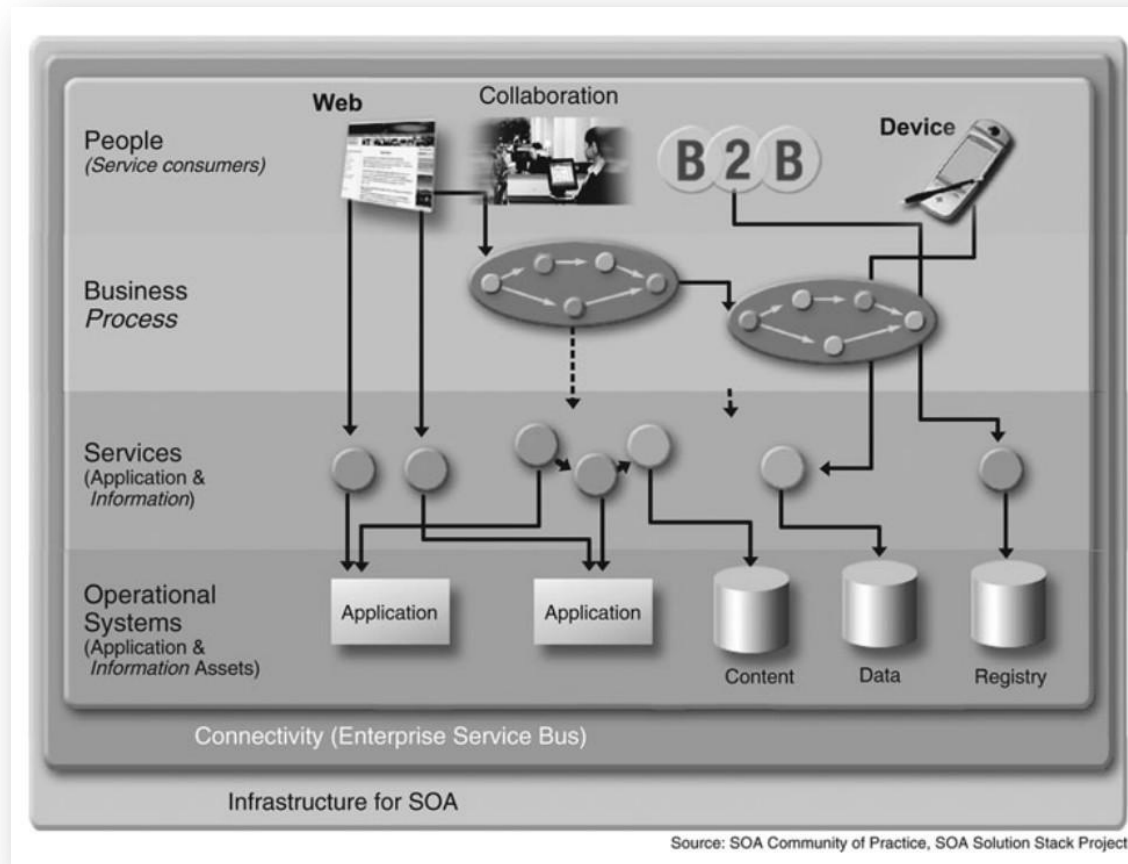
SOA in Practice, , Nicolai M. Josuttis

Koncept SOA

- Snížení nákladů na vývoj a integraci
- Snadná rozšiřitelnost a udržitelnost
- Znovupoužitelnost komponent/služeb
- Integrace zastaralých (legacy) aplikací
- Zjednodušení zprávy a řízení informačních systémů
- Just-in-time řízení (podnikání v reálném čase)

Architektura SOA

- Procesní vrstva
- Vrstva služeb
- Aplikační vrstva
- Technologická vrstva

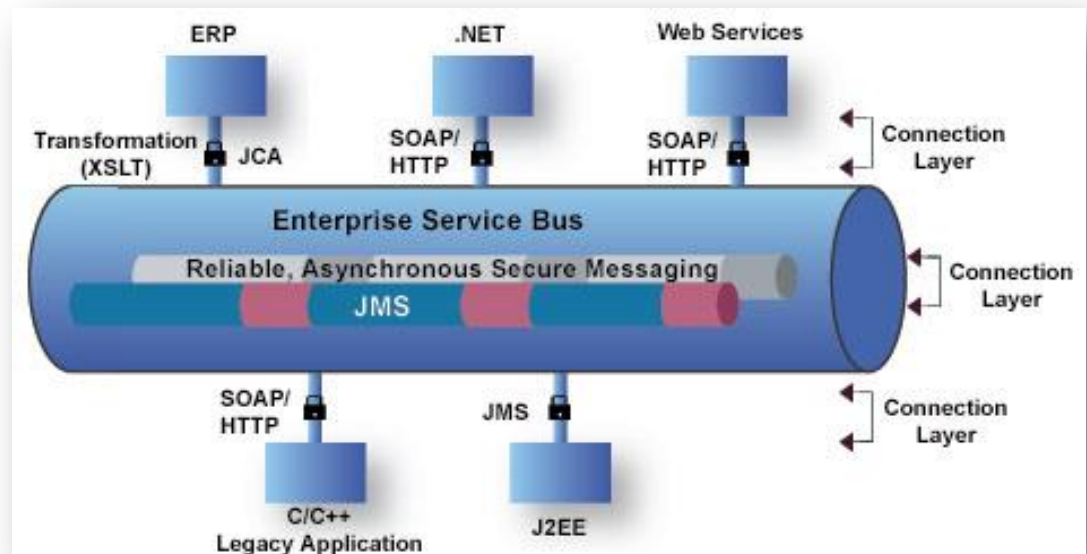


Web Service

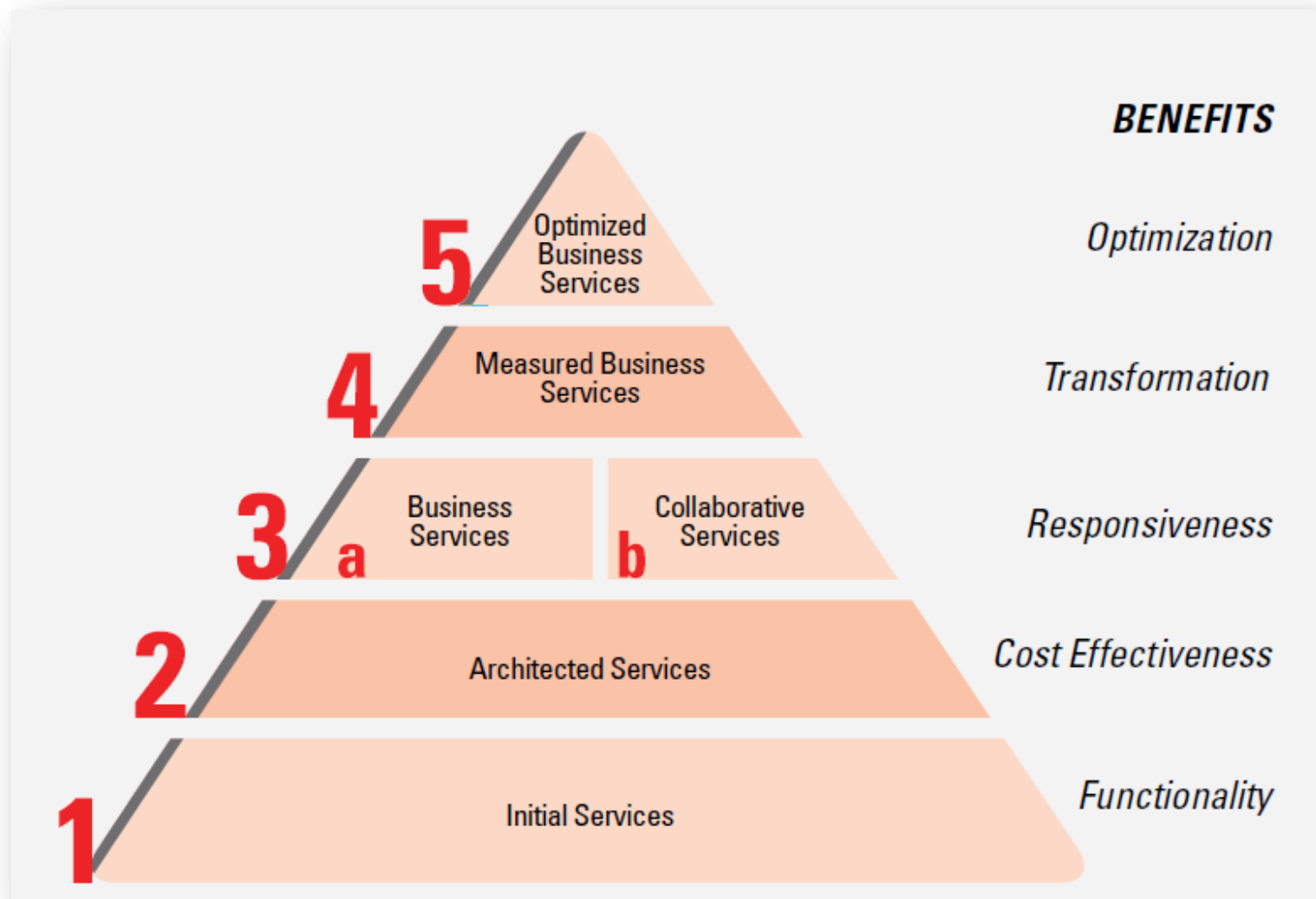
- Služba pro přenos zpráv umožňující vzdálené volání procedur
 - Zprávy jsou přenášeny ve formátu XML
 - Transportním protokolem je HTTP/HTTPS
- Web service definuje
 - Operace (metody) a jejich parametry
 - Návratové typy

ESB – Enterprise Service Bus

- Routování zpráv
- Konverze na jednotný protokol
- Orchestrace komunikace



SOA – Maturity Model

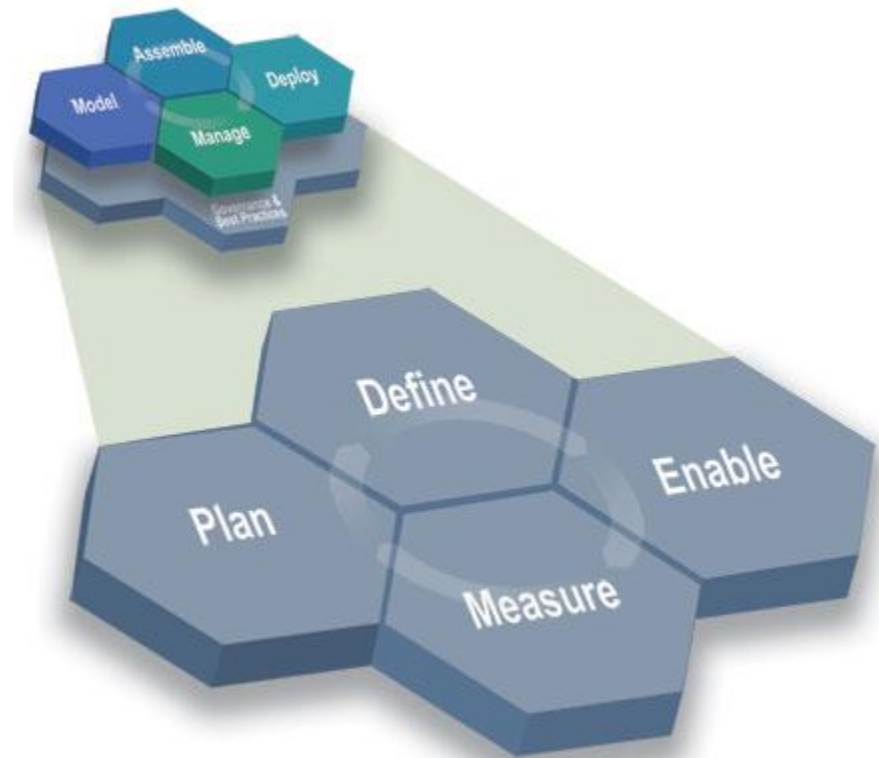


SOA Maturity Model – Dimension Matrix

	1: Ad-hoc	2: Standardised	3: Managed	4: Measured	5: Agile
People	<ul style="list-style-type: none"> No SOA team Little or no knowledge of SOA 	<ul style="list-style-type: none"> SOA Arch team Basic roles & resp. defined 	<ul style="list-style-type: none"> SOA training and certification plan Roles and resp. defined and practiced 	<ul style="list-style-type: none"> Incentives provided based on reuse KM 	<ul style="list-style-type: none"> Creating new business processes by orchestrating underlying services
Process	<ul style="list-style-type: none"> Service life cycle not defined 	<ul style="list-style-type: none"> Service life cycle defined Best practices defined for process, data & services 	<ul style="list-style-type: none"> Process, data & Service modelling Service evangelisation for re-use 	<ul style="list-style-type: none"> Business activity monitored and measured for critical business processes. 	<ul style="list-style-type: none"> Event driven modelling Agile and optimized business processes
Architecture	<ul style="list-style-type: none"> No SOA Reference Architecture No standards/best practices 	<ul style="list-style-type: none"> Initial SOA Reference Architecture with little control Tools selected 	<ul style="list-style-type: none"> Reference Architecture compliant SOA Business, information, application & tech. architectures aligned 	<ul style="list-style-type: none"> Activity and event monitoring infrastructure 	<ul style="list-style-type: none"> Dynamic / configurable SOA infrastructure Event driven technology
Governance	<ul style="list-style-type: none"> No sponsor for SOA strategy No service ownership 	<ul style="list-style-type: none"> SOA is sponsored by top mgmt Arch team tries to manage services 	<ul style="list-style-type: none"> Governance defined Communication plan exists 	<ul style="list-style-type: none"> Metrics & measures implemented Incentive for consumer and provider 	<ul style="list-style-type: none"> Metrics tracked and optimised Federated governance in place
Services	<ul style="list-style-type: none"> No services 	<ul style="list-style-type: none"> Services available Service management introduced 	<ul style="list-style-type: none"> Service management in place Service chargeback defined 	<ul style="list-style-type: none"> Service prioritization, metering implemented Measure and improve service lifecycle 	<ul style="list-style-type: none"> Service virtualisation Dynamic service discovery
Engagement, Delivery & Operation	<ul style="list-style-type: none"> Concept of service operation does not exist 	<ul style="list-style-type: none"> Service delivery engagement defined Estimation model 	<ul style="list-style-type: none"> Services operation process in place Apply lean 6 sigma 	<ul style="list-style-type: none"> Metrics based development, deployment model Benchmark service performance 	<ul style="list-style-type: none"> Integrated service delivery and operation

SOA Governance

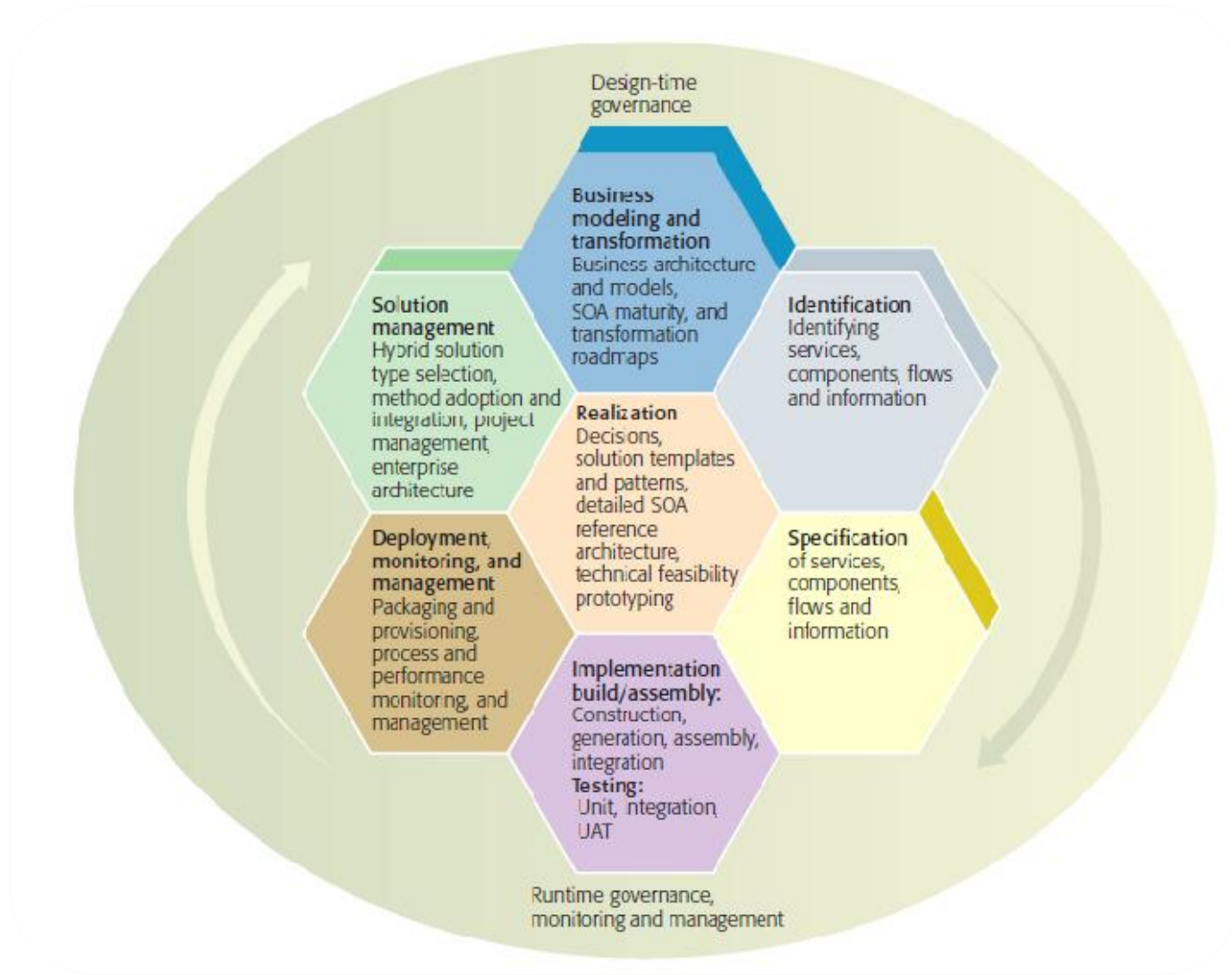
- Service definition
- Service deployment life cycle
- Service versioning
- Service migration
- Service registries
- Service message model
- Service monitoring
- Service ownership
- Service testing
- Service security



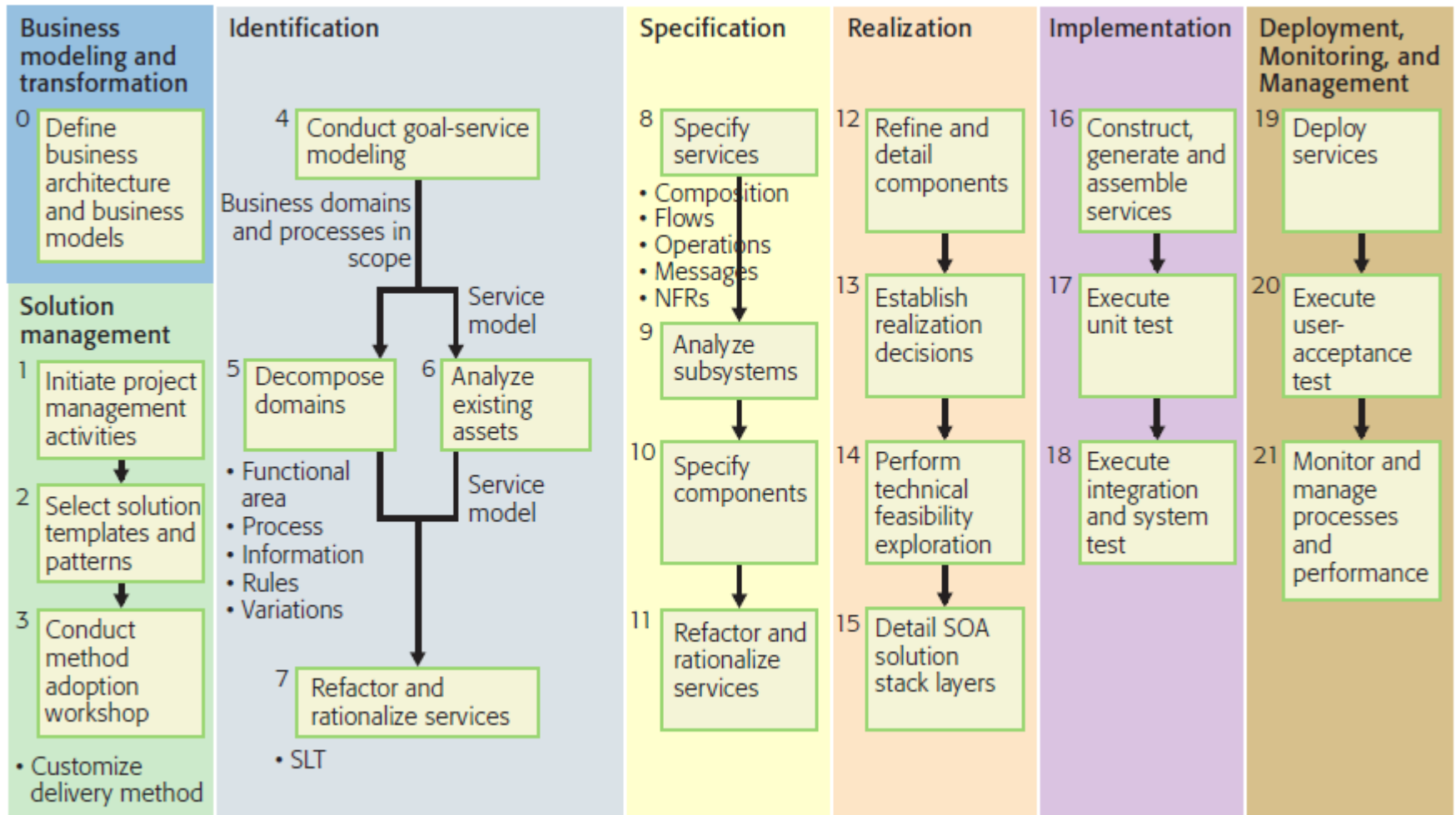
SOA – metodiky

- SOA metodiky
 - IBM SOAD (Proprietary)
 - IBM SOMA (Proprietary)
 - SOA RQ (Proprietary)
 - CBDI-SAE
 - SOAF
- **Service-oriented modeling and architecture**
 - Ali Arsanjani, Chief Architect, SOA and Web services Center of Excellence, IBM, Software Group

SOMA - Fázis



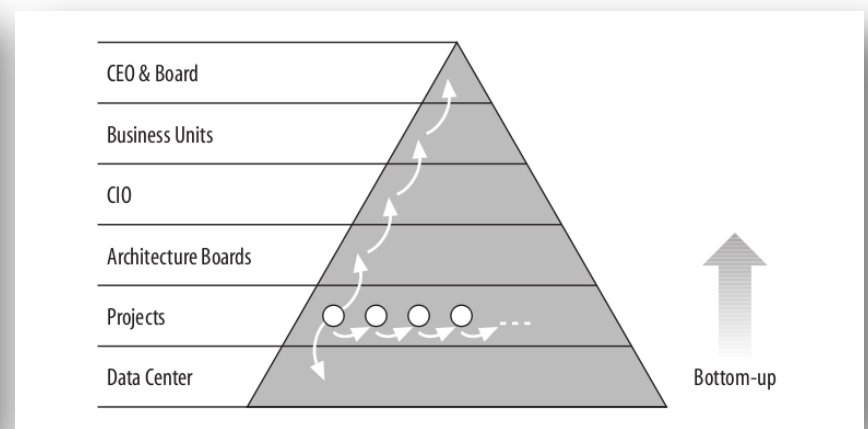
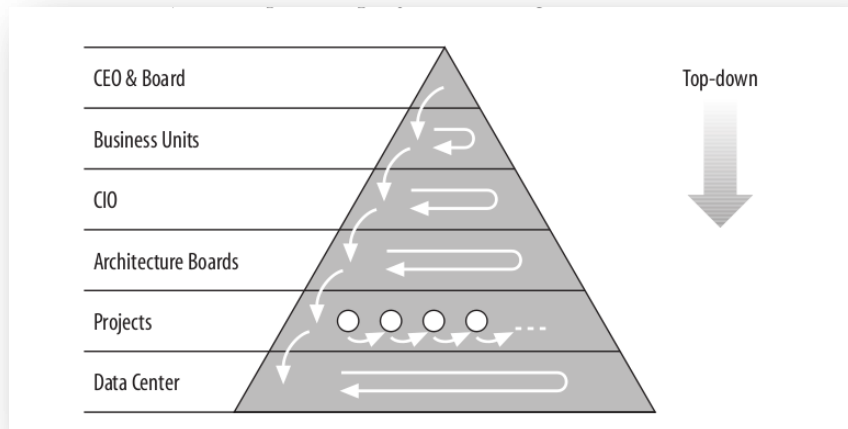
SOMA – Life-cycle flow



Zavádění SOA

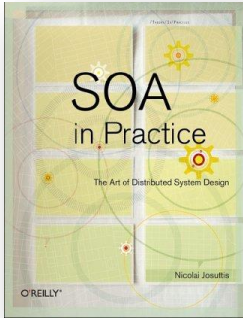
Správně

Špatně – vysoký business risk



Sandy Carter, The New Language of Business SOA & Web 2.0, 2007

Informační zdroje



- **SOA in Practice**, Nicolai M. Josuttis, 2007, ISBN-13: 978-0596529550
- IBM Systems Journal, Volume 47, Number 3, 2008



Kam na SOA (na MU)

- Projekt: Technologický pilot v rámci IS IZS
 - SOA, SOA Governance, BPM, BPMS
- Projekt: SOA4OVSS (ÚVT MU)
 - SOA, SOA Governance

Shrnutí

- Architektura BPM i SOA musí mít své **opodstatnění** v businessu společnosti
- Investice se musí **vrátit** (ROI)
 - Nutná analýza prostředí a návrh optimální varianty
- SOA má **úrovně** vospělosti
- Zavedení SOA musí být v souladu se **strategií** společnosti
- SLA IT architektury představuje **omezení** pro BPM