Industrialized IT-Services: Principles – Prerequisites and Building Blocks

Dr. Helmut Steigele

Agenda

- **What are the elements of industrialized IT-Services**
- The principle of mass customization and the «long tail»
- Prerequisites
- Building Bricks

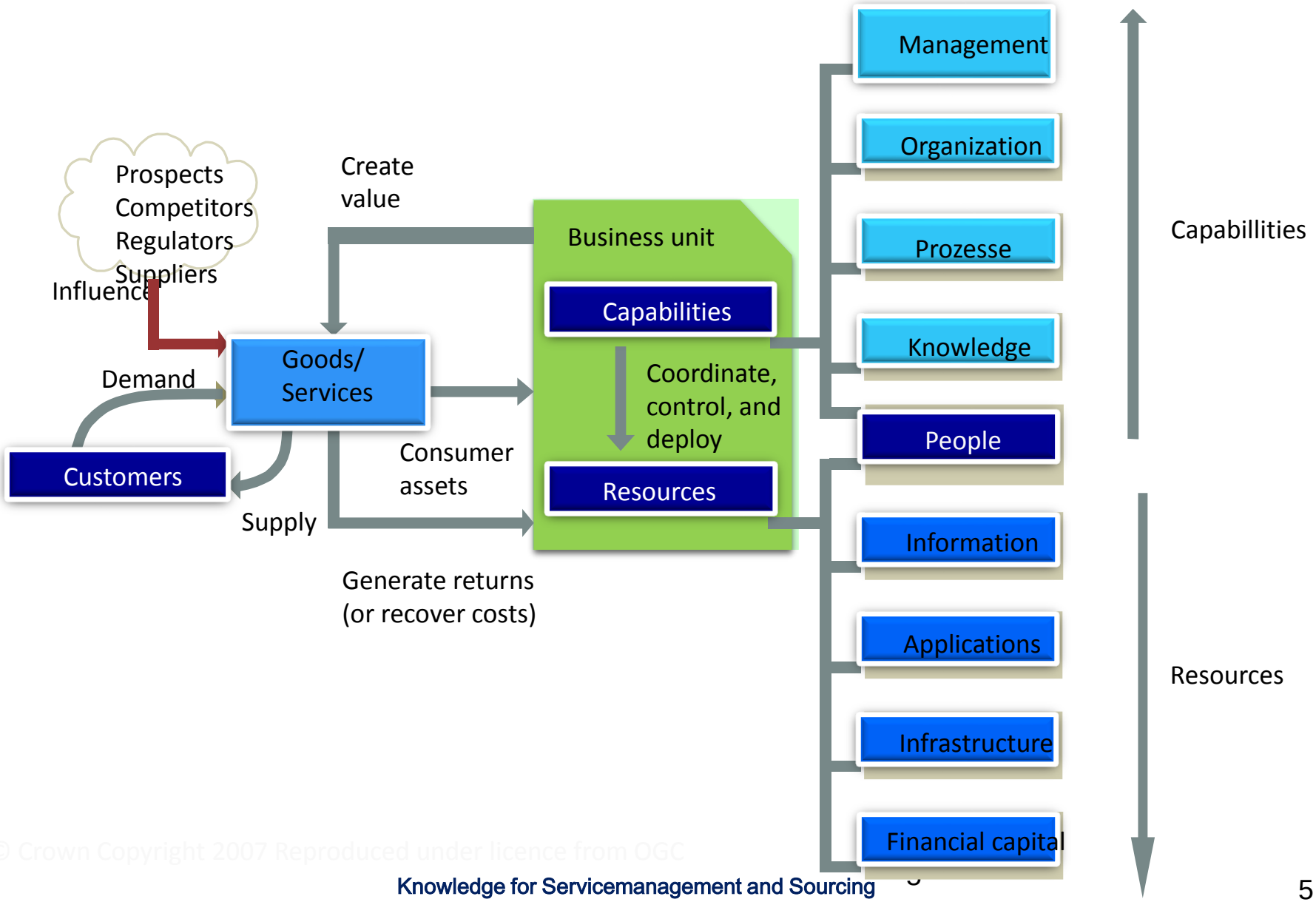
Elements of industrialized Services

- **Capability Mapping – Aligning Voice of Customer with on Capabilities and Resources**
- Using Standard Architectures and Principles of Mass Customization
- Service Value Chains instead of Supply Chains

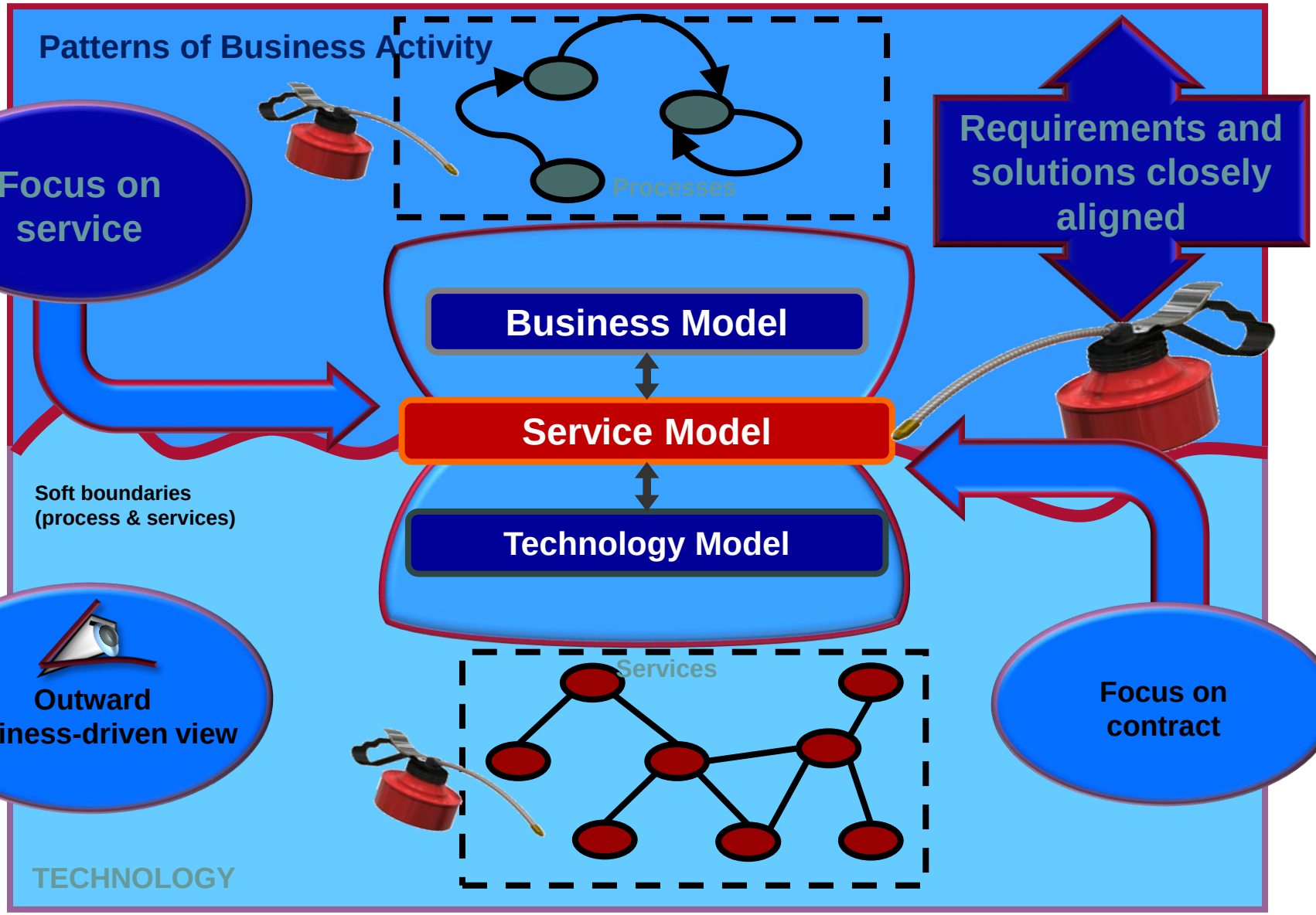
Capability Mapping

- Capability mapping is a modelling method for determining the strategic positioning of an organisation.
- Based on the theory of Porter, Capability Mapping is used to understand the implications of a strategy by viewing it in terms of capability systems.
- Capability Mapping uses activity-system maps for the visual representation of a service model.
- Capabilities should be described by a name and quality characteristics like necessary people, technology, process, management and information.

Capabilities and Resources for one Service



Capability Mapping



Service Model - Approach

Cascade IT

Key Partners

Capabilities

Internal Value Chain

Customer Interaction Model

Value Stream – Patterns of Business Activity

Key Resources

Provideed Interaction Channels

Cost structure

Revenue streams

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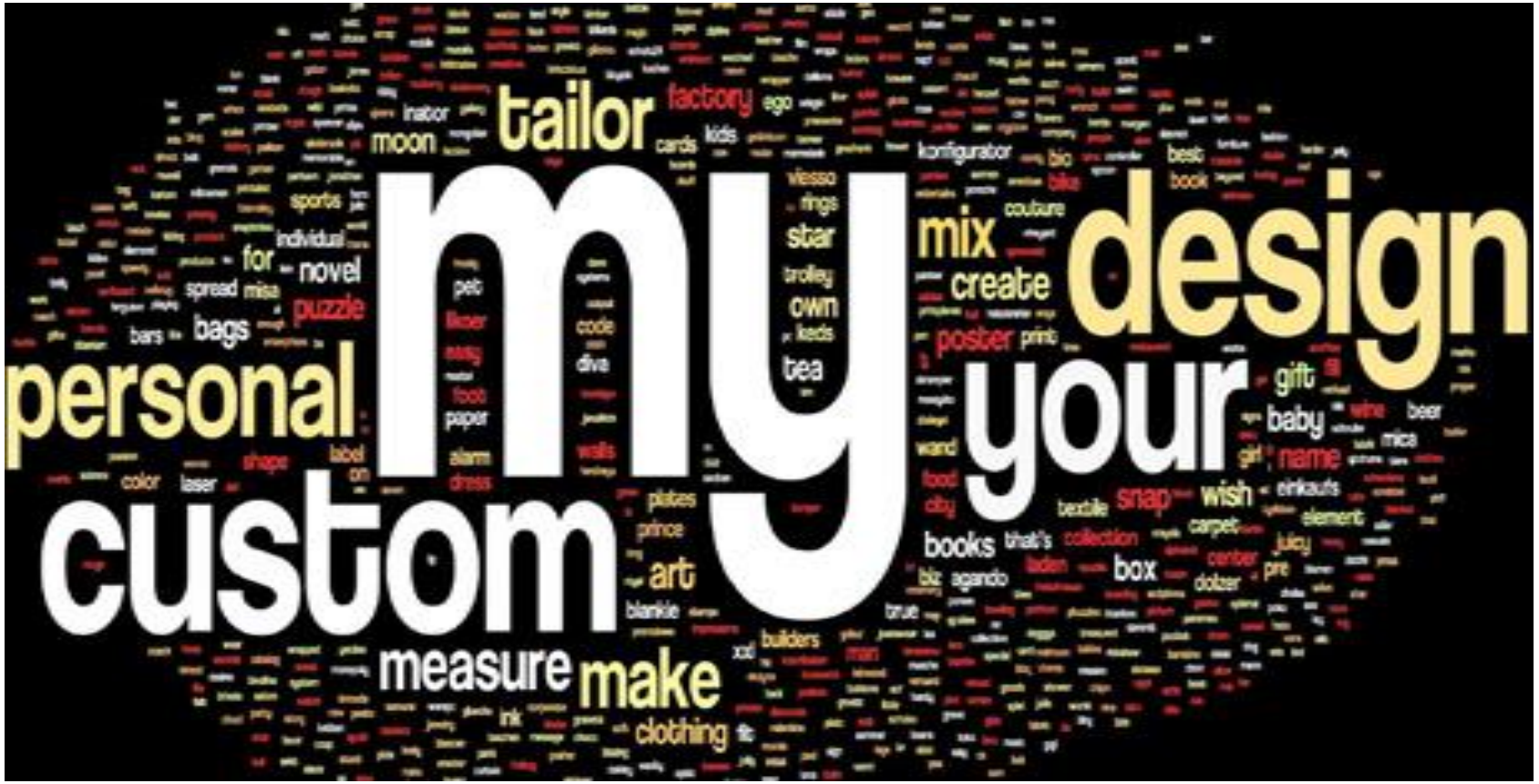
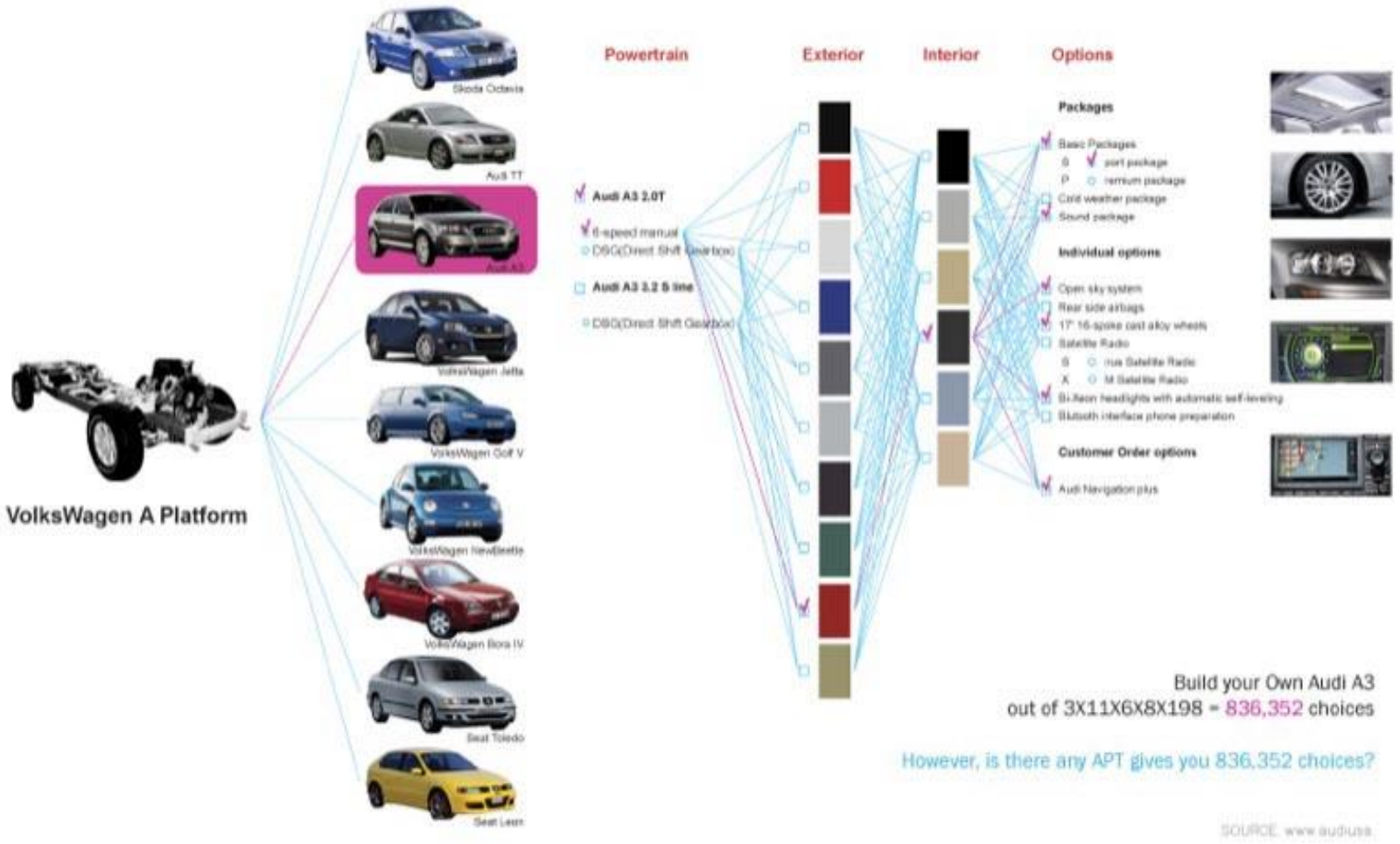
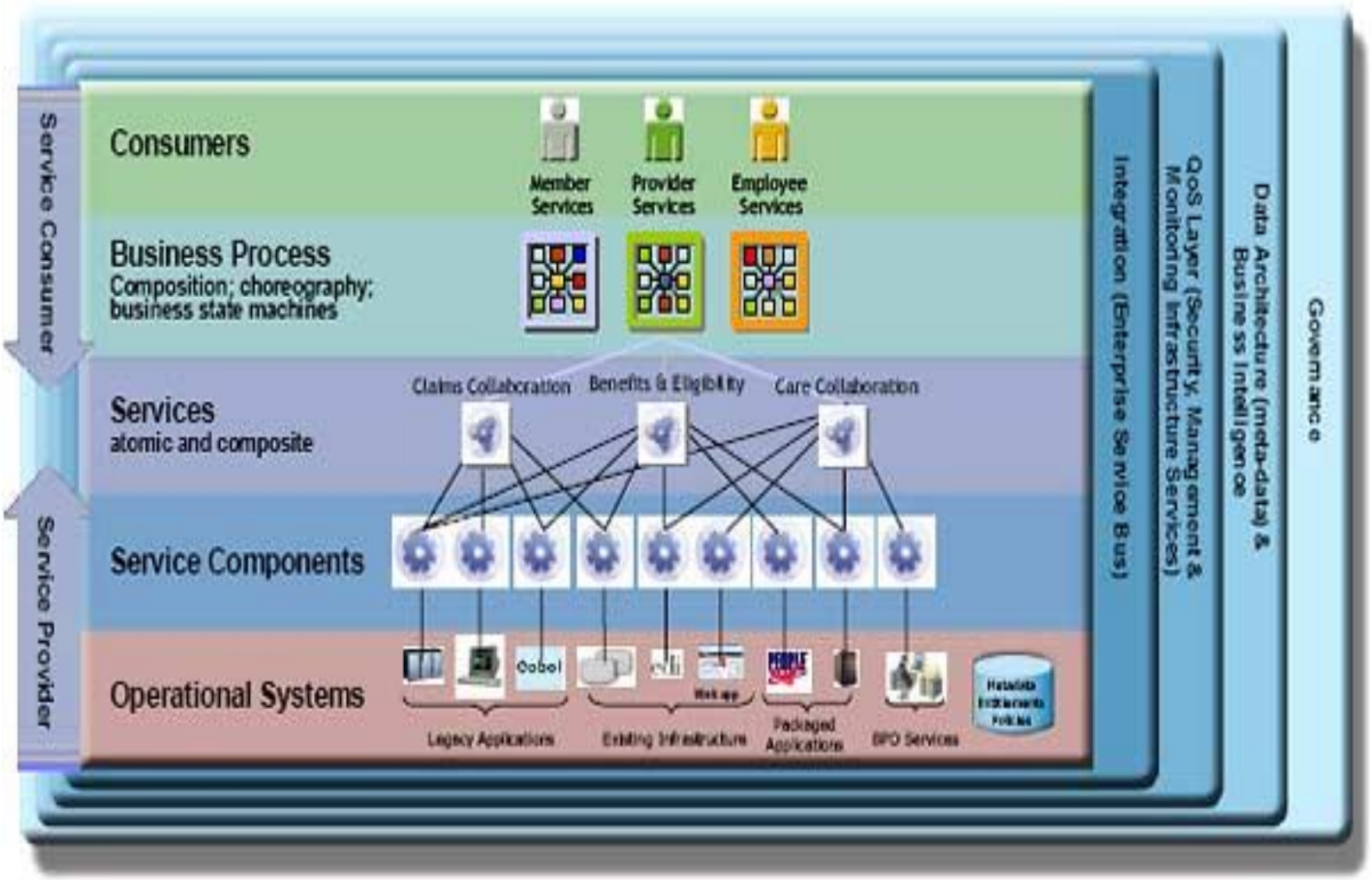
Mass Customaization



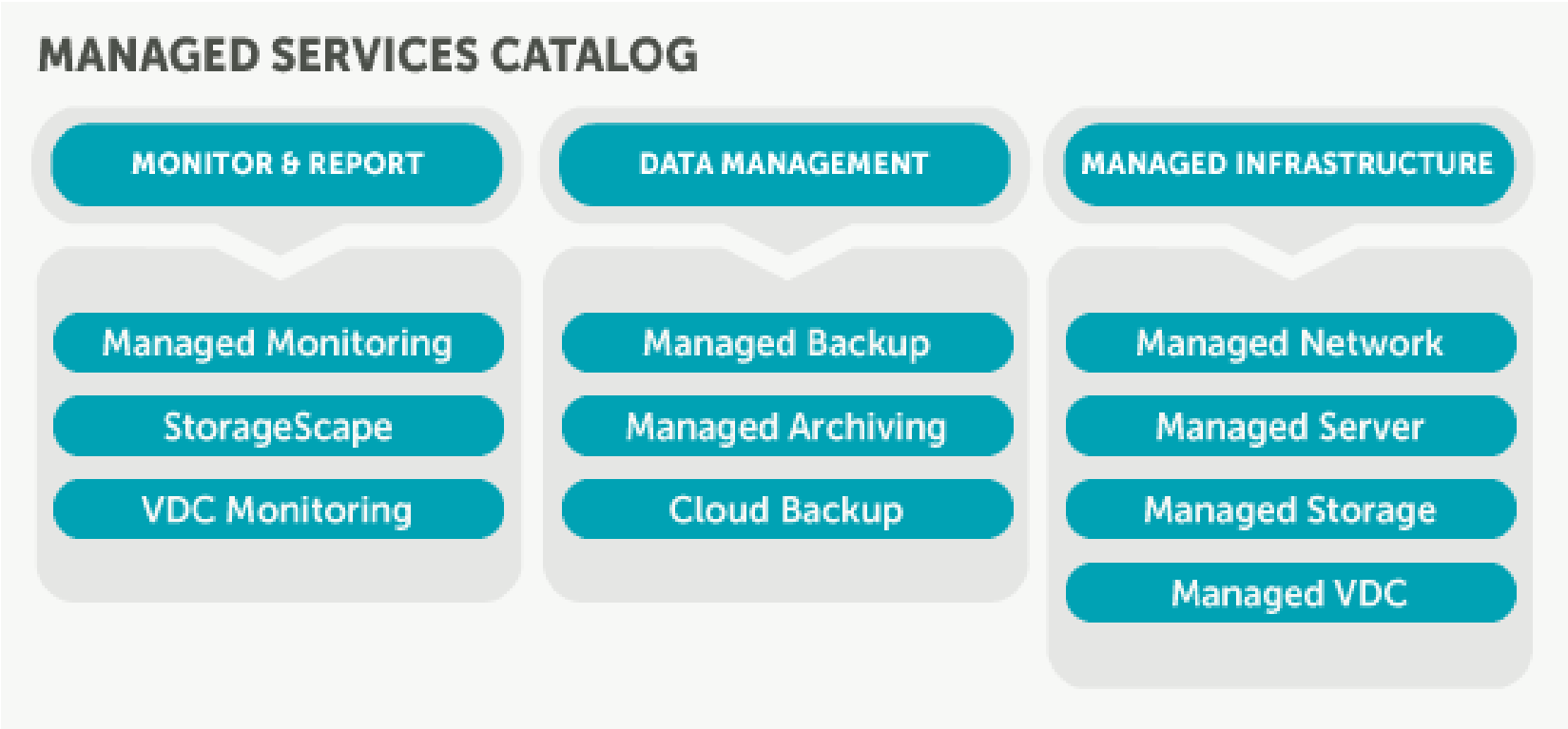
The template from reality



Build your own service



The picture for the customers



Characteristics for IT-based services

01. Modularity of Services – Packaging those into a catalogue of service descriptions (as parts list for automated management and service provisioning)
02. Integration of Customers Voice
03. Application of Configuration Management Systems
04. Information and communication management aligned with IT systems
05. Management of service variety costs
06. Flexible service scheduling
07. Business Relationship Management
08. Efficient service valuechain management
09. Efficient development of new services within a lifecycle approach
10. Efficient fabrication and assembly of services
11. Coordination with retailing network
12. Flexible logistics and handling of final products
13. Utilization of a structured problem solving methodology
14. Continuous learning and retention of employees

Attention: A lot of this is oriented on lean production techniques

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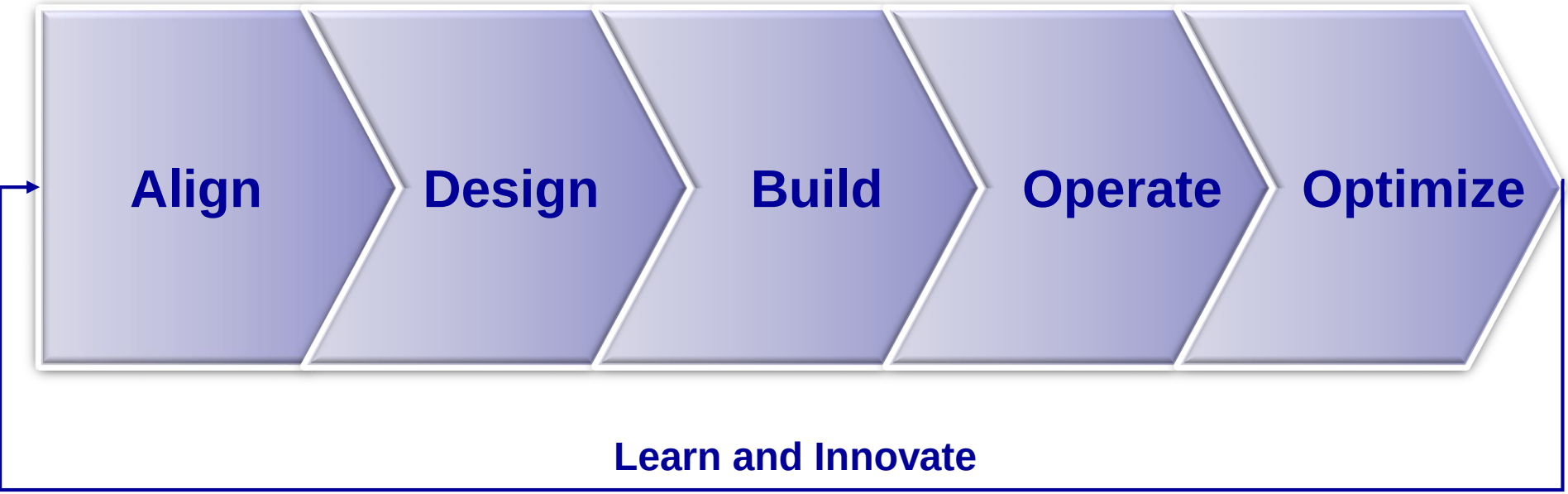
The Service Value Chain



This means

- Hear the Voice of your Customer
  - Use Patterns of Business Activity and Servicemodels
  - Build based on this your «Critical to Quality-Trees on Service Requirements»
- Define or adapt architecture principles to promote «mass customized» service approach
- Establish service catalogue – Use automation mechanisms
- Define policies and use best practice processes or
  - «Lean» your existing processes
- Adapt your «Service Value Chain»
- Adapt Skills and Compentences within your organisation

Agenda

- What are the elements of industrialized IT-Services
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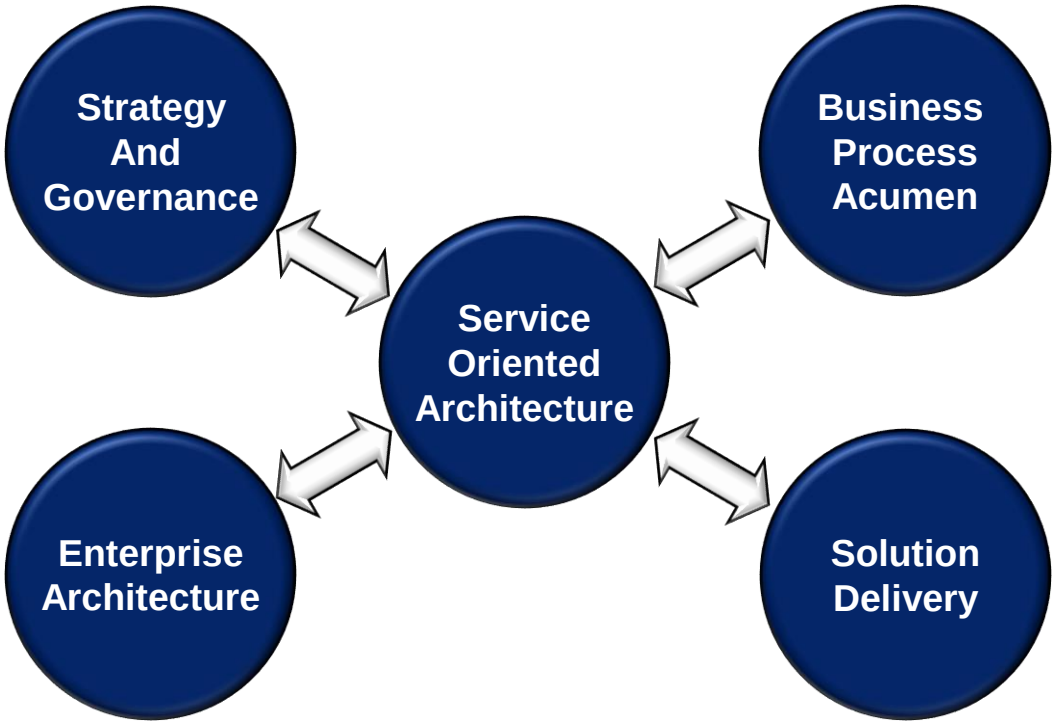
- **Prerequisites for Success**
- Building Bricks

What means –
Delivering industrialized Services

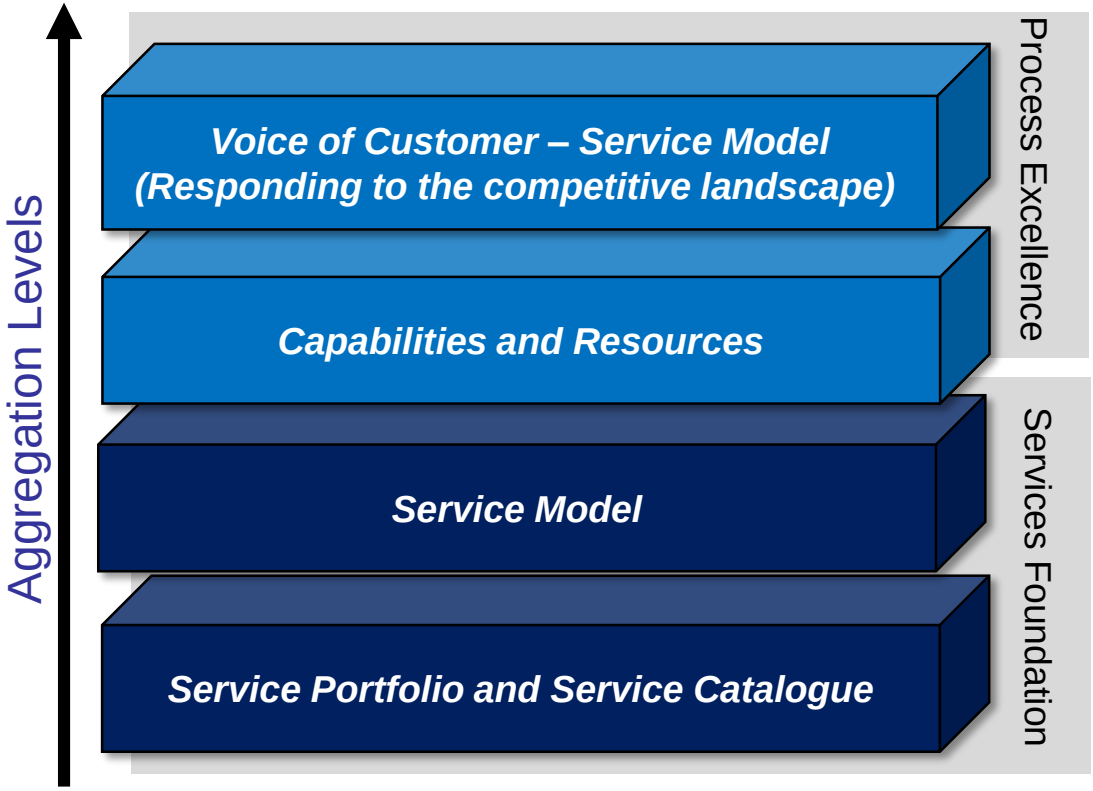


- A service factory requires collaboration with and between several existing enterprise capabilities
- A service factory , in the long term, must be developed with a broad view of business capabilities if it is to be successful
- A service factory will integrate other architectural bricks already in place

An enterprise scale delivery capability for industrialized Services should include all disciplines.

Thinking Outside - In

Industrialized Services are an enabling platform for achieving a high performance end state that is compromised of process-centric, metrics-enabled composite business solutions.



Challenges for Adoption:

- Business does not understand the industrialized Services paradigm
- No strategic view of the architecture blueprint – architecture being driven by tactical requirements
- Segregate Business Units – No view of benefits outside their area
- No overall governance function – Only disparate IT teams managing delivery
- Funding models make initial delivery of business value too difficult /risky (e.g. 90 cycles)

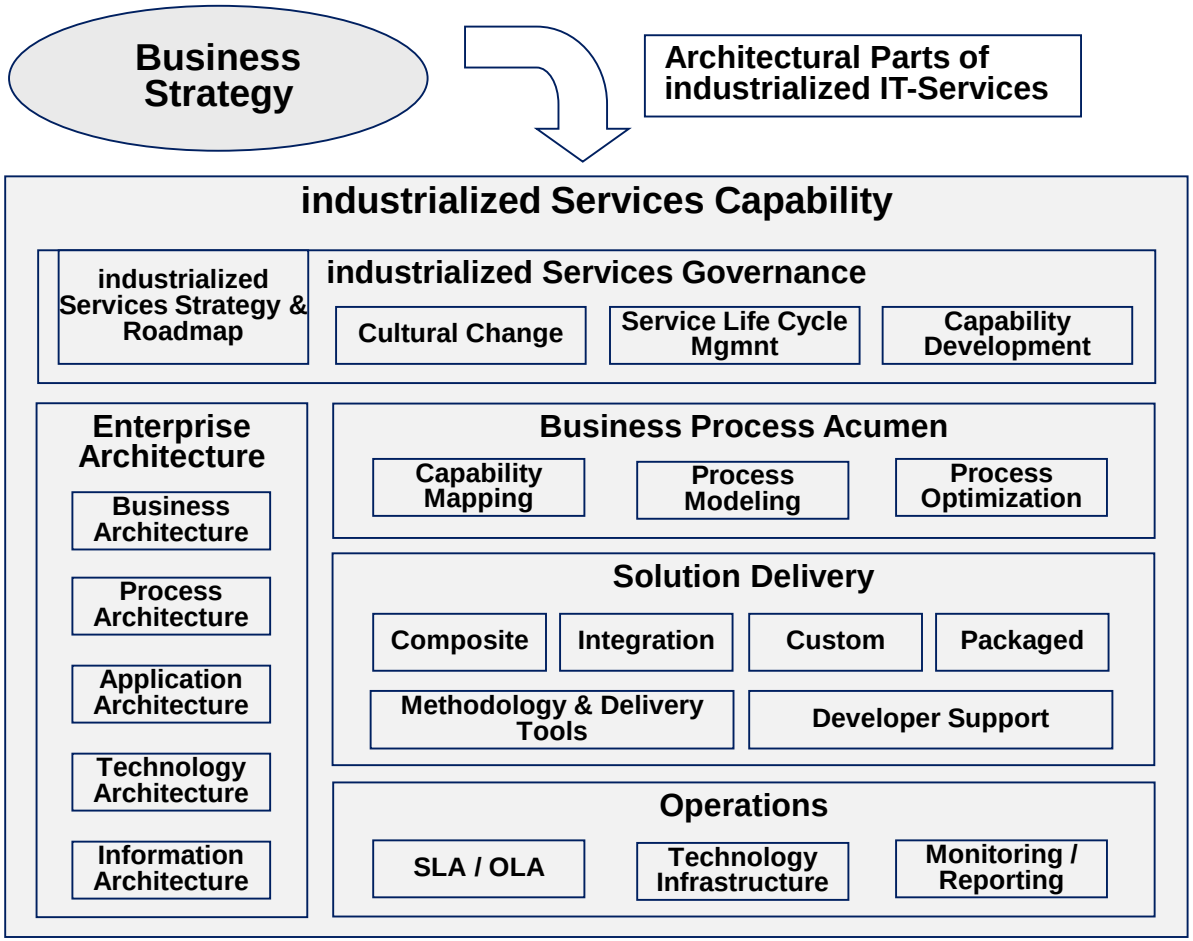
Acting on Business cases

Risks:

- The business case and value proposition of industrialized Services are not well defined resulting in a failure to achieve the business value for adopting industrialized Services
- The roadmap for industrialized Services is not clearly defined and the long-term execution managed resulting in a failure to achieve the broader goals
- The Service Identification process is not standardized and Architecture reviews are not performed resulting in a poorly defined target industrialized Services
- Service development practices are not standardized and policies are not enforced resulting in poorly implemented services

Setup of Capabilities before Acting

An overall framework is required for industrialized Services adoption and the development of an industrialized Services capability. The level of impact will depend on the individual organization. While not all aspects need to be addressed at the onset, all areas are eventually required to be successful.



A capability is made up of people, process and technology

These disciplines are required to deliver industrialized Services.

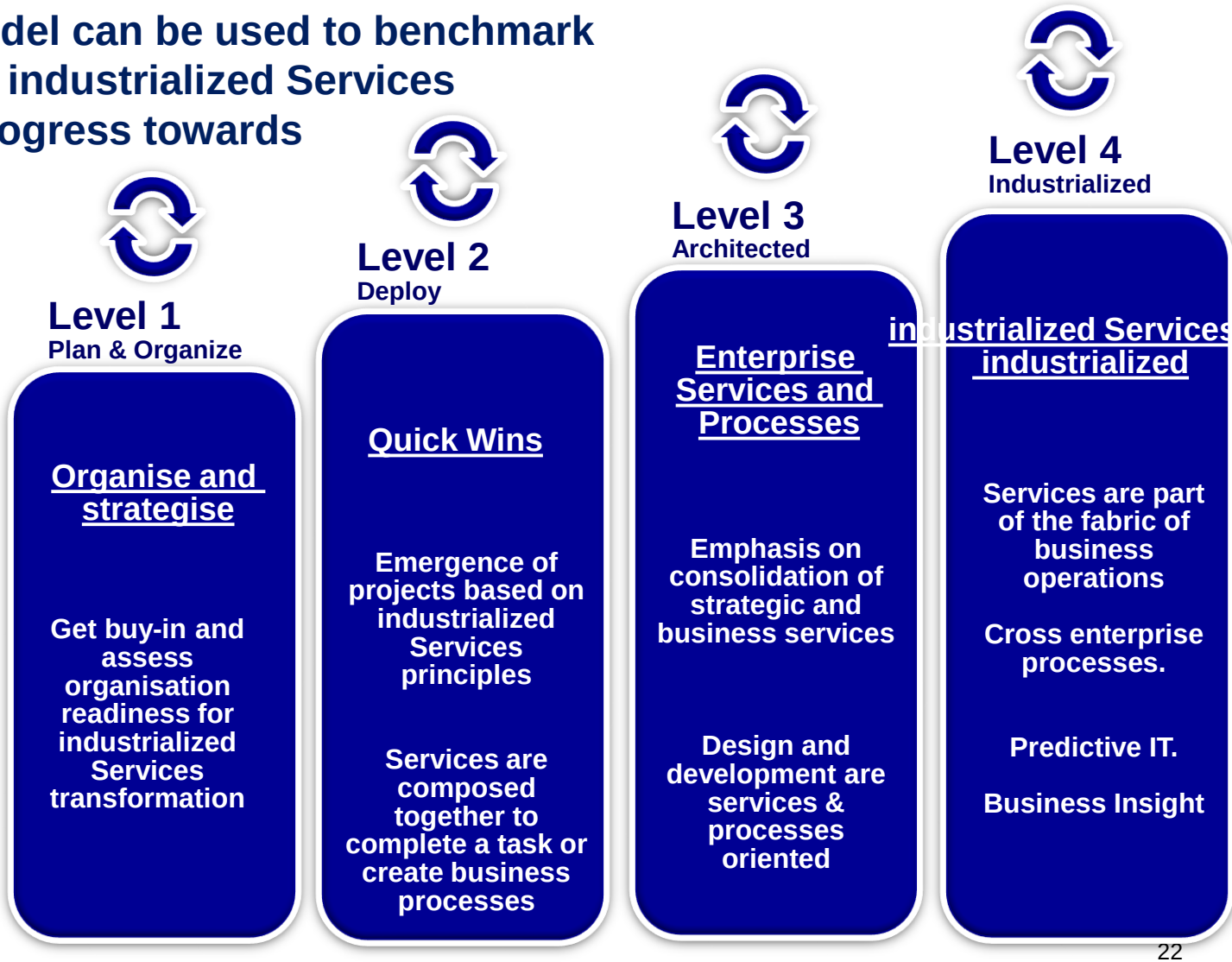
- **industrialized Services Governance is a new discipline comprised of Business and IT leadership ensuring an industrialized Services vision is defined and achieved.**
- **The other existing disciplines will require some change to adopt industrialized Services and ensure successful delivery.**

Promoting - Step by Step

This maturity model can be used to benchmark an organizations industrialized Services capability and progress towards industrialization.

A roadmap will help develop the industrialized Services capability across your organization.

The maturity model can be used for planning roadmap activities.



Potential Risks with Ungoverned industrialized Services

Risk	Impact
The business case and value proposition of industrialized Services are not well defined resulting in a failure to achieve the business value **for adopting industrialized Services**	• Misalignment of Business and IT Objectives **due to a lack of common goals being communicated** • Opportunity Cost **for not achieving the maximum ROI from industrialized Services**
The roadmap for industrialized Services is not clearly defined and the long-term execution managed resulting in a failure to achieve the broader goals	• Loss of Momentum **in making progress to achieve the long term goals of industrialized Services, including potential project abandonment** • Opportunity Cost **for not achieving the maximum ROI from industrialized Services** • Deterioration in Architecture **and a potential increase in cost due to a lack of long term management**
The Service Identification process is not standardized and Architecture reviews are not performed resulting in a poorly defined target industrialized Services	• Lack of Interoperability **due to siloed business services** • Lack of Reuse **due to an proliferation of single-use services and a tightly coupled & inflexible architecture** • Unnecessary Development Expenditure **due to service rework and repair**
Service development practices are not standardized and policies are not enforced resulting in poorly implemented services	• Lack of Reuse **due to unpredictable service quality and services not conforming to Service Level Agreements** • Potential Loss of Revenue **due to a higher frequency of service outages** • Higher Support Costs **due to poor service quality and higher frequency of outages**

Before Starting

- Define governance framework and identify key roles as a first priority (IT and Business)
- Define the strategic goal and roadmap to achieve the end goal
- Identify key quick wins that will bring out most of the benefits in a short period of time to gain buy-in
- Speak to sponsors in terms of benefits and ROI rather than how cool the technology and latest tools are
- Ensure benefits are clearly defined upfront and there is a tracking mechanism in place in order to measure benefits once projects are delivered
- Avoid tactical fixes whenever possible as they are likely to stay there for longer than anticipated and there will be a resistance to change them later on.

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