

**Smart Services in** 

Industry:

Challenges and

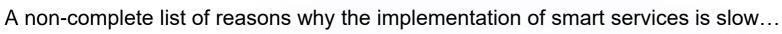
**Solutions** 

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Picture created with Dall-E: "fully automated industry 4.0 production facility with emphasis on the use of smart services"

#### What holds us back?





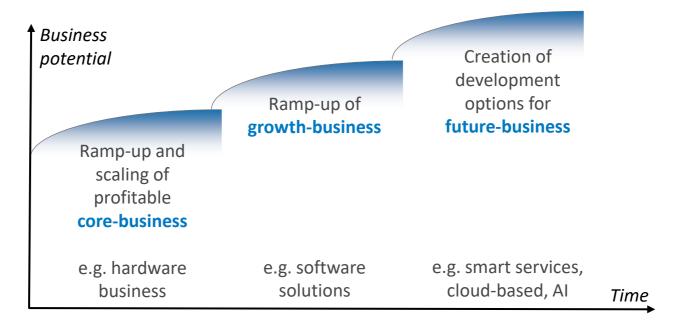
**High initial** investment *Integration with* Economic Unclear value uncertainty legacy systems propositions *Inter-disciplinary* Communication Lack of Resistance to Processes and standardization Complexity of change organization not ready Regulatory and implementation compliance issues **Environmental** Social Data privacy Lengthy corporate implications *implications* Workforce Security decision processes concerns skill gap concerns



#### **Smart services at the crossroads**

The three horizons of strategic innovation management







#### Decisions...

Need to be taken without knowing the **technical** capabilities of the future



... might lead to...

... un-maintainable legacy systems.
... closed doors for certain solutions in the future.
... postponed huge investments to a later point in time.

## **Technical architecture for system agility**

Trade-offs for data-based, smart services in industrial facilities

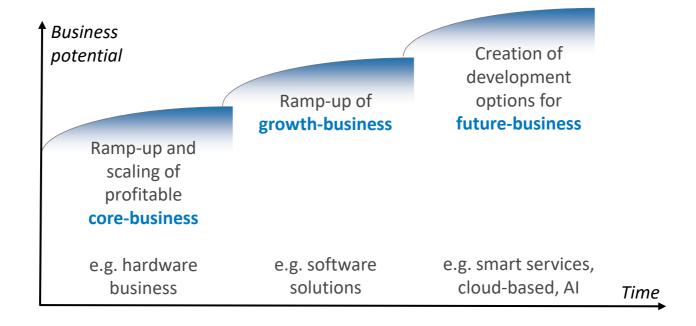


Criteria TechStack		Technical (		Business			Practical		0		
Data-based service		Data Volume	Compute	ility	New	ent	New bus.mod.	spe	Updates	ion	The customers' concerns and regulatory frameworks need to be respected!
Public Cloud	ر			Scalability		Reg. payment		Investment needs		Re-certification	
Private Cloud										Re	Data
Server / On Premise		Speed	Automation	Control	Known	Transact. sales	Simple bus.mod.	Legacy Syst.	1-time install.		Barrier  Leverage the entire TechStack! E.g. Federated Al systems, data-centric approaches, etc.
Real-time computing / Edge										Staff	
Sensors											

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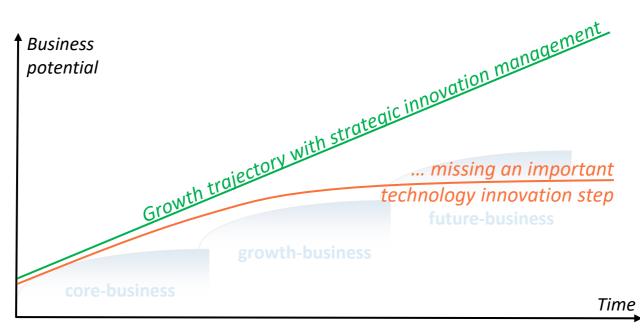




### **Smart services at the crossroads**

The three horizons of strategic innovation management





Decisions...

Need to be taken without knowing the business capabilities of the future





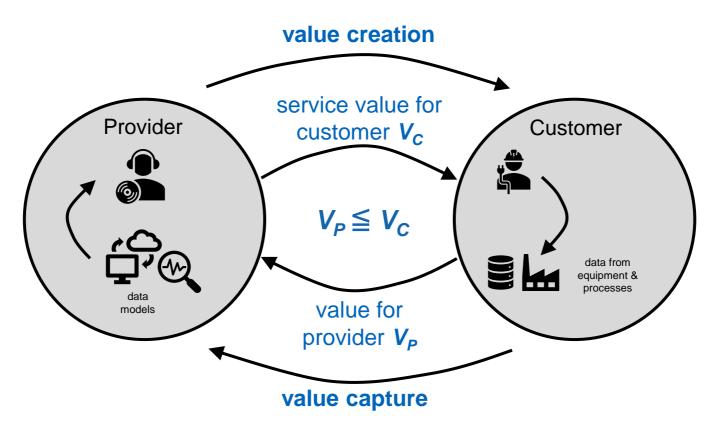
... might lead to...
... missed opportunities.

... stagnating / shrinking business. ... loss of competitiveness.

## A quantitative model for value creation and value capture

Measure the value of a solution

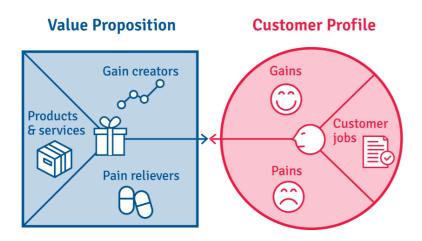




## Estimating the total business potential of a solution

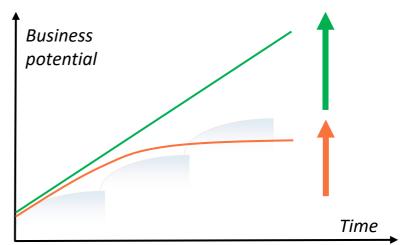
Gains and pains





The **total business potential** is a combination of the value creation by...

- → Creating gains
- → Solving pains



- Estimate the total value of a solution and derive the business potential.
- Make good investment-decisions based on a quantitative model.
- ✓ Shorten the decision process by providing an established framework.





# Thank you!



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