

# Servitization

Successfully developing and selling product-service solutions

Prof. E.J. Nijssen

Innovation, Technology Entrepreneurship & Marketing, TU/e

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# Objectives

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Definition and background

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Types of offerings

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Motivation and Benefits

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Organizational issues & change  
management

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Impact on marketing/selling

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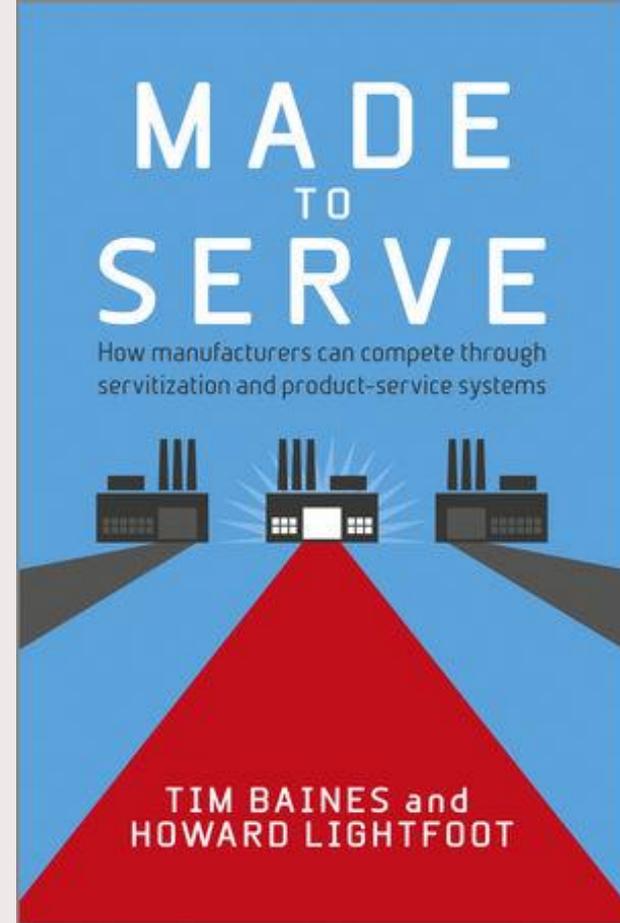
Conclusions & discussion

# Servitization

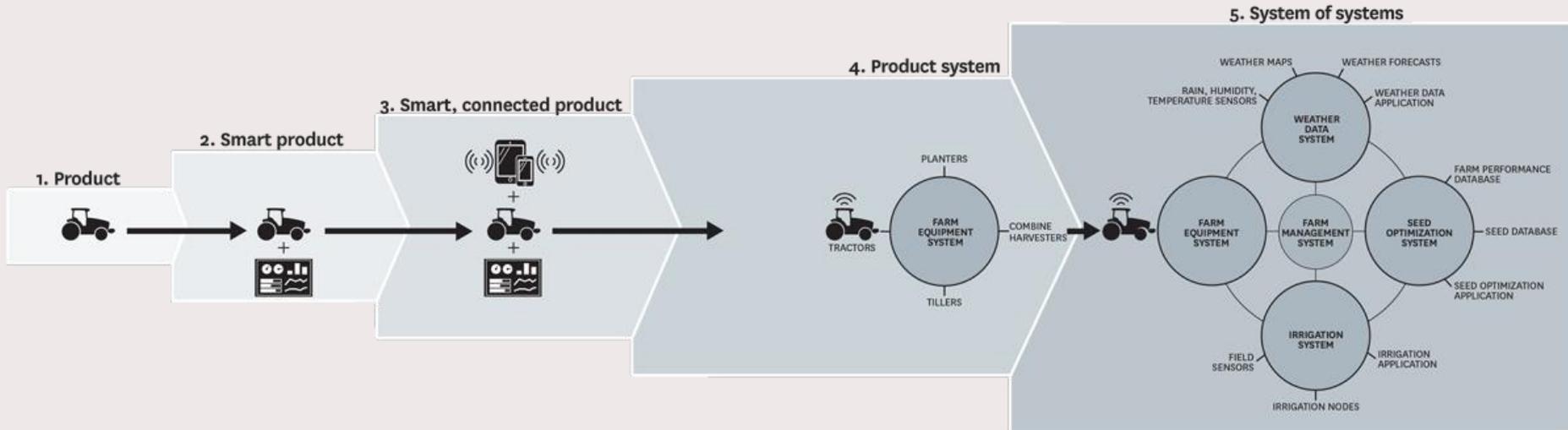
Definition: the **transformation** of firms from being suppliers of **basic products or services** towards becoming providers of **integrated solutions**, also known as **hybrid offerings** or **product-service systems (PSS)**.

Examples:

- **Rolls Royce's** “power-by-the-hour”
- **Xerox's** document management services
- **Atlas Copco's** “compressed-air-as-a service”
- **Aebi Schmidt's** clean roads
- **ASML's** “pay per waver”



# Example: impact of digitalization



Porter and Heppelman (2014)

# Illustration



e.g. Lely (total solution), Connecterra (fit bit for cows)

**VALUE  
PROPOSITION**

**Result**

3

*I'll take care of everything*

**Performance**

2

*I'll do a performance, so you don't have to worry about it*

**Input**

1

*I'll provide an input, but then you're on your*

**Product**

**Customer pro**







Poppy is a shared mobility platform in Antwerp and Brussels offering both eco-friendly shared cars and electric shared scooters.

**VALUE  
PROPOSITION**

**Result**

3



**Performance**

2



**Input**

1



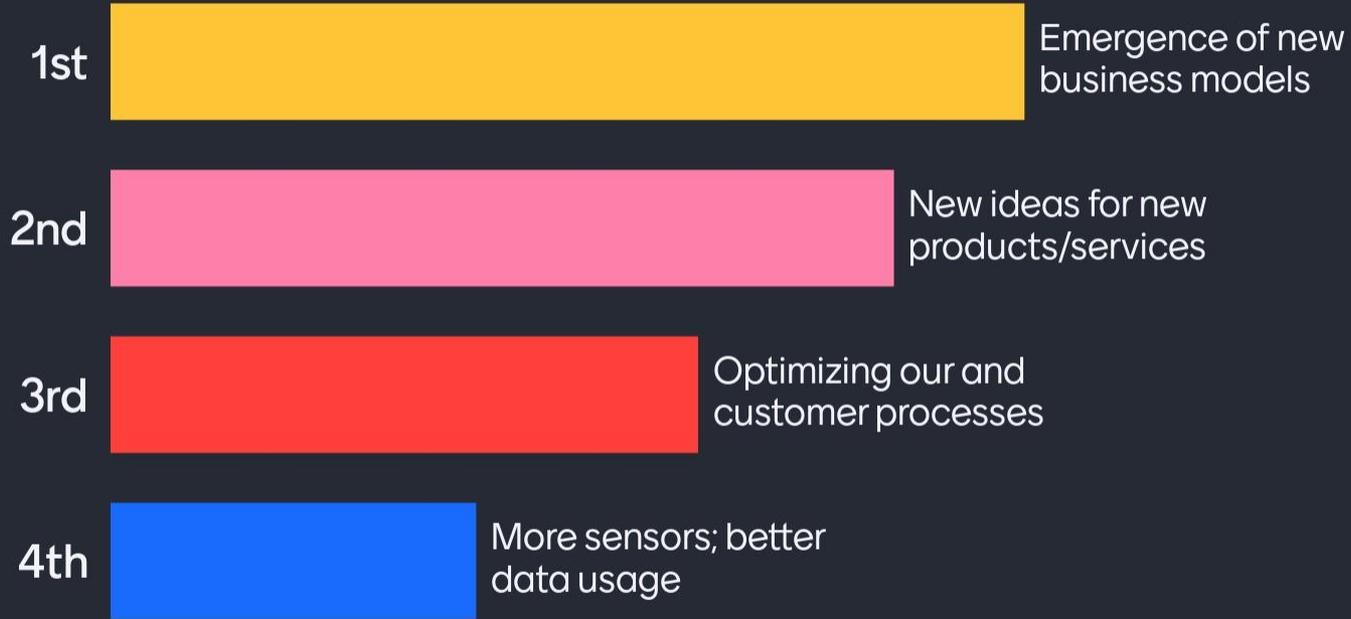
**Product**

**Customer process**

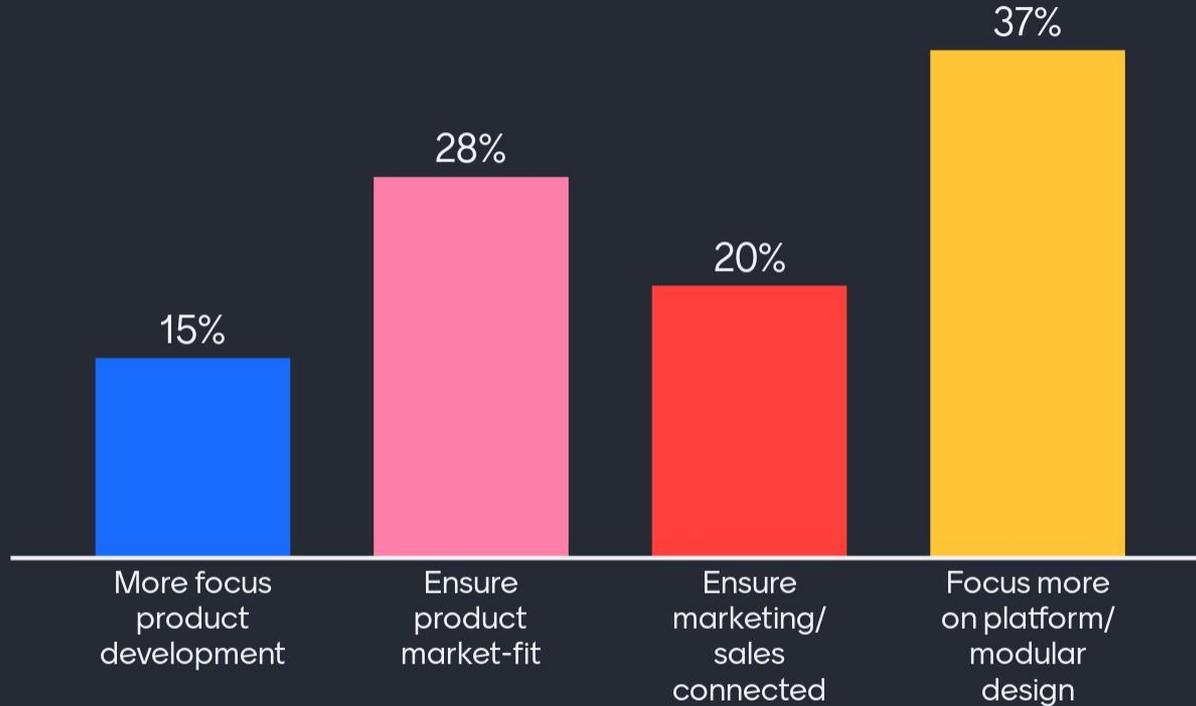
# MENTIMETER QUESTIONS

- general impact of servitization trend*
- impact on development process*

# What is the impact of the servitization trend?



# How will the system architect's role be affected?



# Servitization strategy

## Benefits for successful providers

- Closer customer relations and better insights
- Focus on value rather than volume/prices
- Opportunity to sell additional services
- Better customer satisfaction and loyalty
- More stable, continuous revenue stream

## Impact

- Change to product + service is rather easy
- Integrated service requires major investment and organizational change; service culture required

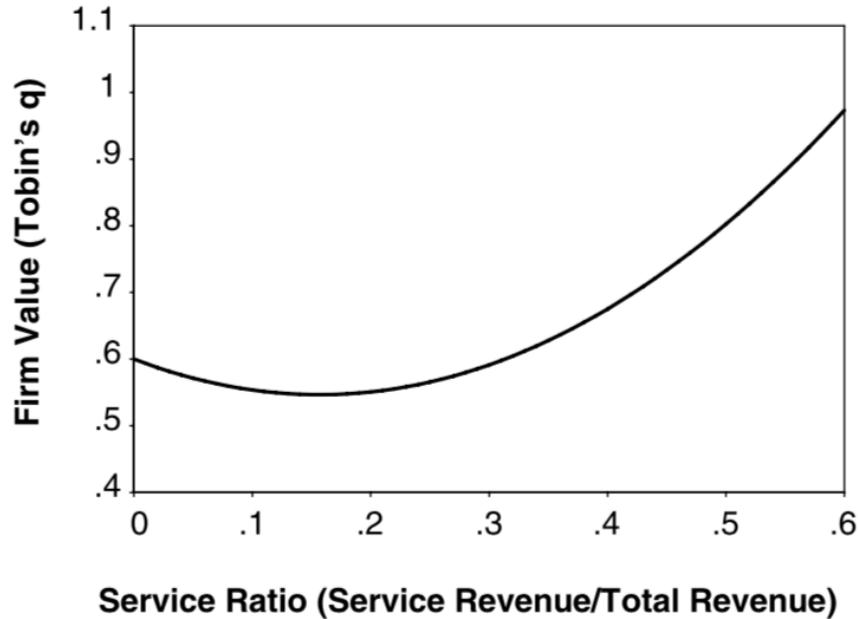
# Effect of service transition strategies on firm value

## Research questions:

- (1) Do **service transition strategies** increase **firm value** (i.e. Tobin's q)?
- (2) What level of **service intensity** is required for transition strategies to contribute to firm value?
- (3) Which **firm and industry factors** increase or decrease the value of service transition strategies?

➤ These RQs are investigated by integrating multiple secondary sources of longitudinal data on **477 publicly traded U.S. manufacturing firms from 1990 to 2005.**

**FIGURE 1**  
**Firm Value Across Different Service Ratios:**  
**1990 to 2005**

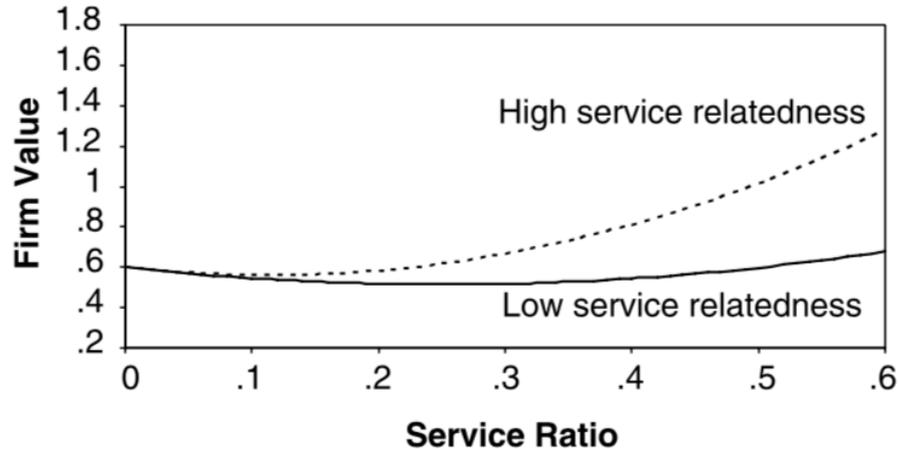


Fang et al. (2008)

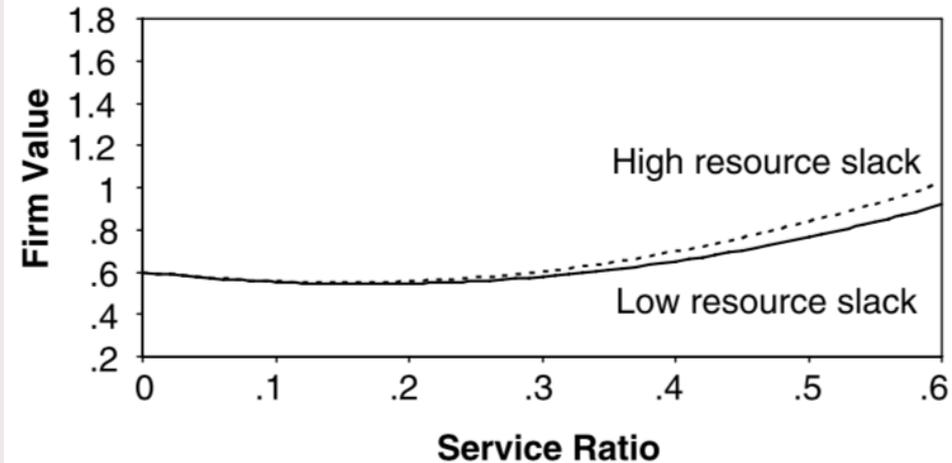
*Firms need a minimum set/percentage of services to begin enjoying positive results of the strategy*

**FIGURE 2**  
**Firm-Level Moderators of the Effect of Service Ratio on Firm Value**

**A: Moderating Effect of Service Relatedness**



**B: Moderating Effect of Resources Slack**



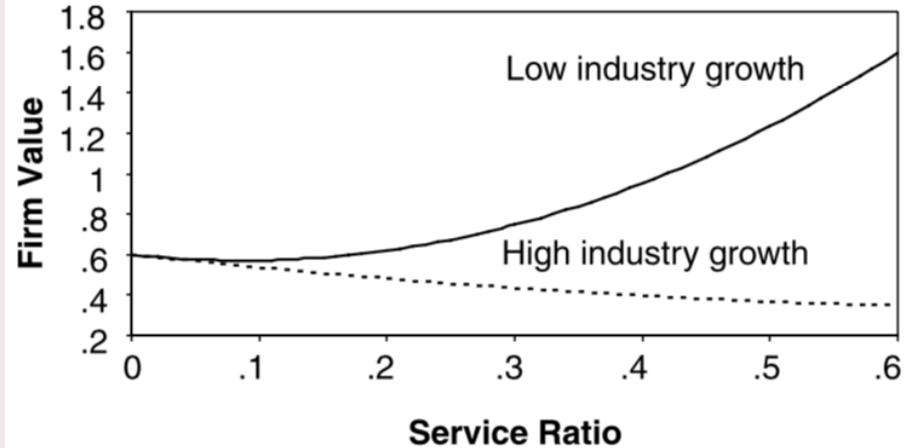
Fang et al. (2008)

*Firms that create related (vs unrelated) services, and those with high resource slack perform better*

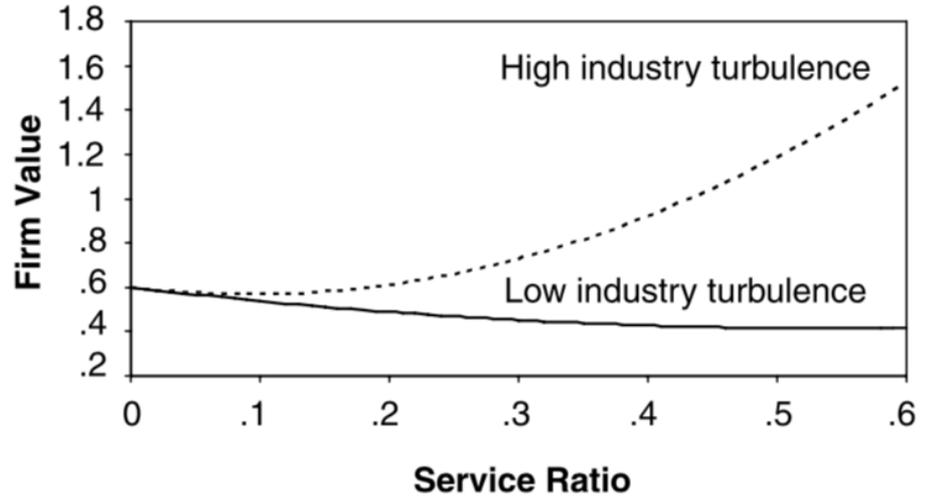
**FIGURE 3**

**Industry-Level Moderators of the Effect of Service Ratio on Firm Value**

**A: Moderating Effect of Industry Growth**



**B: Moderating Effect of Industry Turbulence**



Fang et al. (2008)

*Firms in mature (low growth), and those operating in turbulent industries enjoy better results from their servitization efforts*

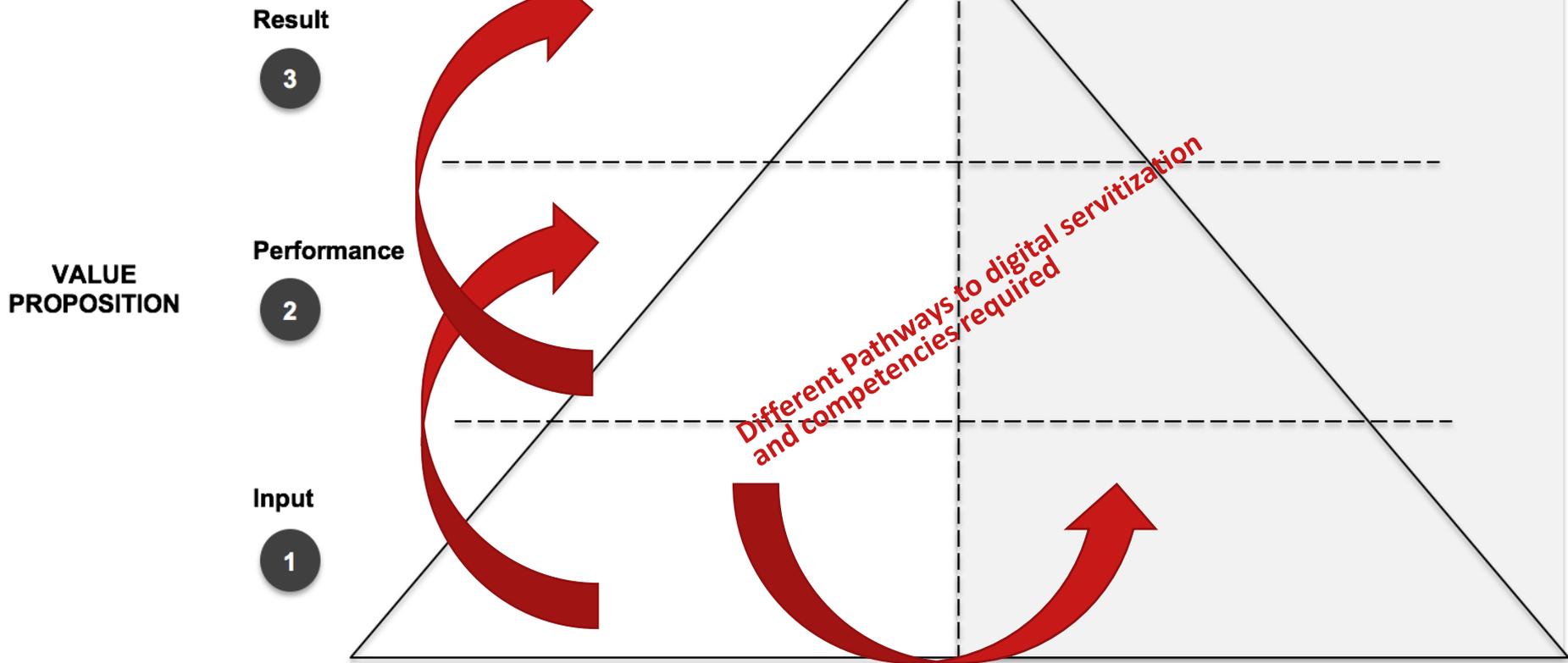
# Effect of service transition strategies on firm value

## Managerial implications:

Managers should recognize that service transition strategies enhance firm value only:

- (1) Beyond a **meaningful minimum of services**, in the ballpark of 20%–30%;
- (2) If the **service is strongly related to the firm's core** manufacturing business;
- (3) When **industry growth is sluggish**;
- (4) When the **industry is volatile**.

# Drawing on previous model different pathways exist



## Managing the transition ...

**You need to understand your installed base and be able to leverage on it**

*“The first difficulty reported in performing this transition is the required **cultural change** for a product-centered organization to become service-oriented”* → Gebauer et al. (2010). The impact of service orientation.

*“We found that a critical success factor for this transition is the creation of a **separate organization** to handle the service offering”* → Gebauer et al. (2005). Overcoming the service paradox; Oliva et al. (2012). Separate or integrate?

	Privacy		Collaboration		Data mgt	General inhibitors		
IoT enabled business model	Privacy concerns	Data security	Require close collaboration with stakeholders	Require new ways of customer interaction	Require skills and expertise in data mgt	Technical issues	High upfront capital investment	Develop innovative offerings that align with customer needs
Add-on								
-innovative digital service								
-leverage customer data								
-Sharing								
Usage based (pay per use, subscription)								
Solution-oriented								

# Providers of Product Service Systems (PSS) systematically underestimate customer concerns

Number of times in focus group providers versus customers mentioned a type of risk related to selling/buying PSS

**Table 3**

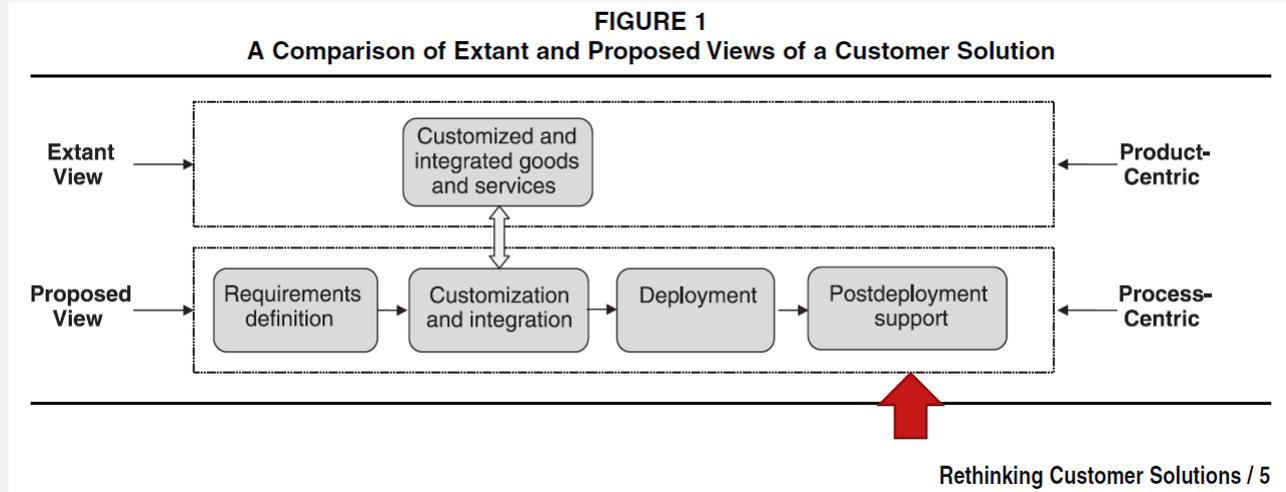
Number of sources and (percentage) for each risk category mentioned by customers and providers.

Risk dimension	Frequency		Z-test of proportions
	Providers (n = 23)	Customers (n = 37)	
Privacy	14 (60.87%)	22 (59.46%)	0.11
Functional	1 (4.35%)	29 (78.38%)	9.11*
Financial	12 (52.17%)	14 (37.84%)	1.07
Psychological	6 (26.09%)	21 (56.76%)	2.46*
Temporal	2 (8.70%)	4 (10.81%)	0.27
Social	4 (17.39%)	2 (5.41%)	1.34

\* Absolute value of Z is greater than the critical value at  $p \leq .05$ .

(Paluch and Wunderlich 2016)

# From Selling Product Bundles to Relational Processes



(Tuli et al 2007)

# Important to align front and back office activities

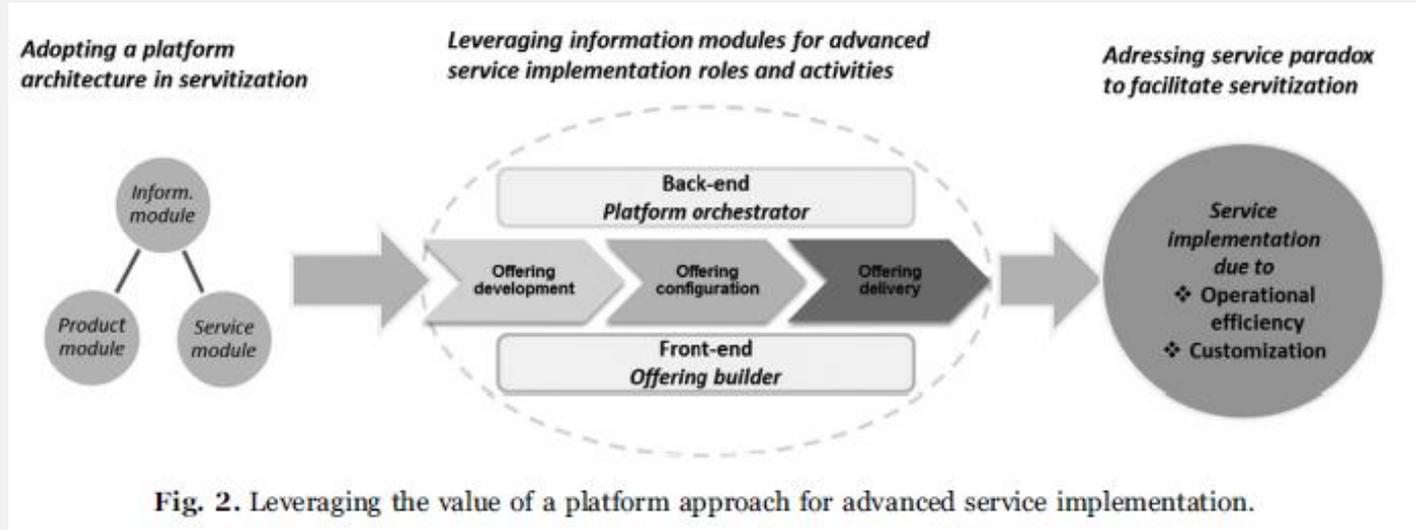


Fig. 2. Leveraging the value of a platform approach for advanced service implementation.

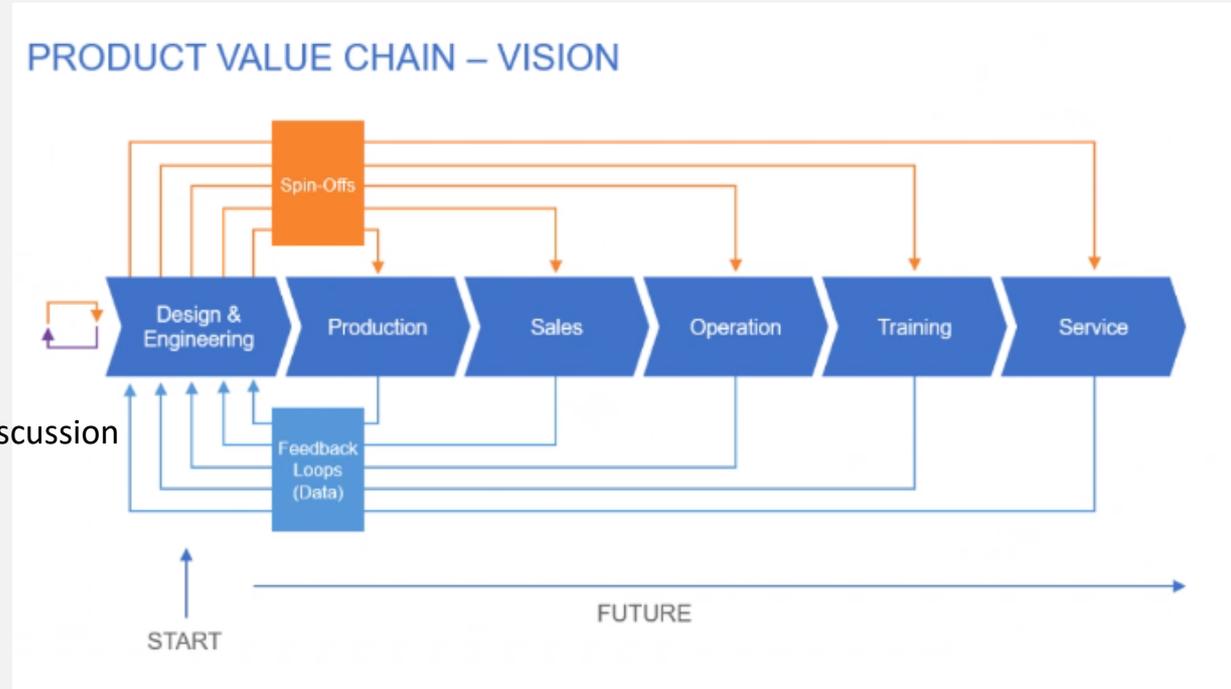
Cenamore et al (2017)

# Feedback loops vs. new organization/collaboration

Last time: Robert Hendriksen

The changing organization;  
Important feedback loops.

Let's use Mentimeter to open discussion



# Conclusions

- Servitization is important trend; driven by digitalization and sensor technology/IoT
- Requires serious investments before turning profitable
- Requires serious cultural change; service-oriented culture
- Requires solution rather than product selling
- Technology generally is less of a problem than items specified above

Thank you for your attention; questions?

# MENTIMETER QUESTIONS

- how will system architect's role be affected?
- main challenges you see for domain of SA

# When should sales be involved in the development process?

