

**Warwick Manufacturing Group  
University of Warwick 1 October 2014**

# **Engagement within Ecosystems: Platform Architecture Facilitating Value Co-creation**

Roderick J. Brodie, Suvi Nenonen & Kaj Storbacka  
University of Auckland Business School

[r.brodie@auckland.ac.nz](mailto:r.brodie@auckland.ac.nz); [s.nenonen@auckland.ac.nz](mailto:s.nenonen@auckland.ac.nz); [k.storbacka@auckland.ac.nz](mailto:k.storbacka@auckland.ac.nz)



**4<sup>th</sup> Forum for Markets and Marketing, FMM2014**

June 16-19, 2014, Karlstad, Sweden

# **Patterns of Engagement within Service Systems**

Rod Brodie, Suvi Nenonen, Kaj Storbacka,  
Tilo Böhmann, Paul Maglio



**1** MOTIVATION

**2** WHY ECOSYSTEM?

**3** WHY ENGAGEMENT?

**4** WHY ENGAGEMENT PLATFORMS?

**5** WHY PLATFORM ARCHITECTURE?

# **1 MOTIVATION**

2 WHY ECOSYSTEM?

3 WHY ENGAGEMENT?

4 WHY ENGAGEMENT PLATFORMS?

5 WHY PLATFORM ARCHITECTURE?

**Special Issue: Advancing Knowledge about Markets and Marketing  
and Service Dominant Logic**

**Guest Editors: Roderick J Brodie and Kaj Storbacka**

## Contents

### Editorial

- Collaborative theorising about markets and marketing  
and service-dominant logic 231  
*Roderick J. Brodie and Kaj Storbacka*

### Commentary

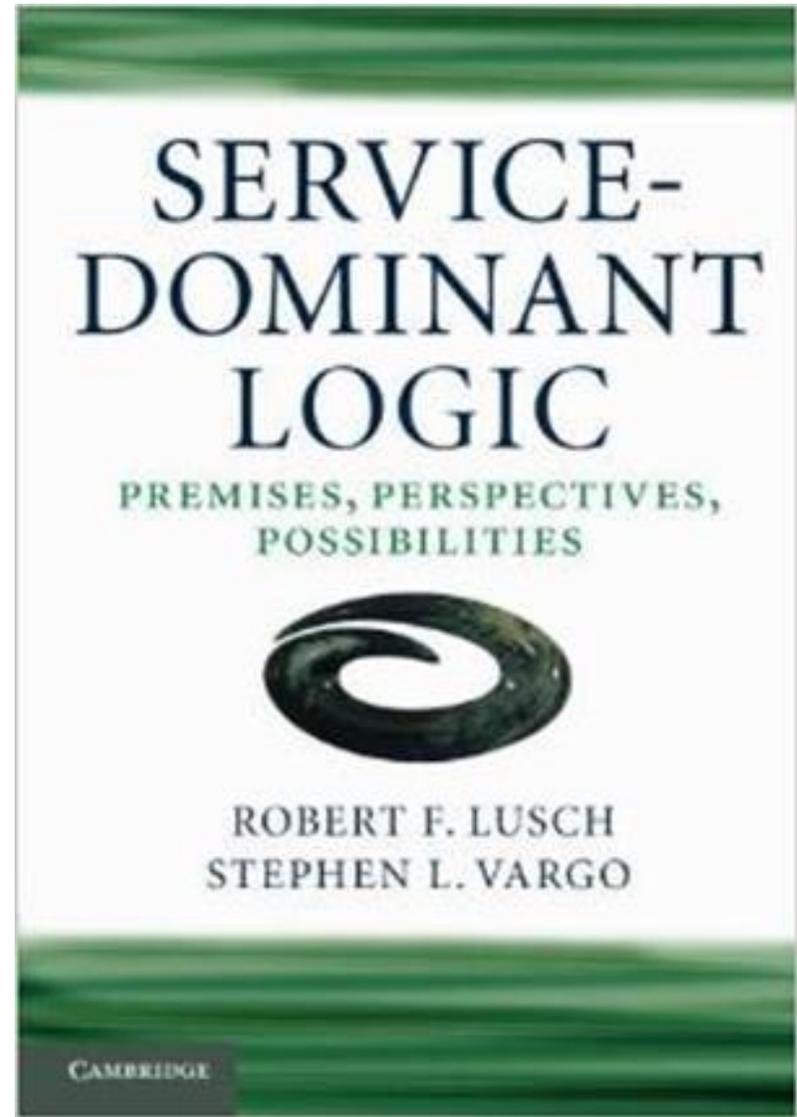
- Inversions of service-dominant logic 239  
*Stephen L. Vargo and Robert F. Lusch*

### Articles

- Theorizing about resource integration through service-dominant logic 249  
*Linda D. Peters, Helge Löbler, Roderick J. Brodie, Christoph F. Breidbach, Linda D. Hollebeek,  
Sandra D. Smith, David Sörhammar and Richard J. Varey*
- A new perspective on market dynamics: Market plasticity  
and the stability–fluidity dialectics 269  
*Suvi Nenonen, Hans Kjellberg, Jaqueline Pels, Lilliemay Cheung, Sara Lindeman, Cristina Mele,  
Laszlo Sajtos and Kaj Storbacka*
- Institutional logics matter when coordinating resource integration 291  
*Bo Edvardsson, Michael Kleinaltenkamp, Bård Tronvoll, Patricia McHugh and Charlotta Windahl*
- The role of symbols in value cocreation 311  
*Melissa Archpru Akaka, Daniela Corsaro, Carol Kelleher, Paul P. Maglio, Yuri Seo,  
Robert F. Lusch and Stephen L. Vargo*
- Value propositions: A service ecosystems perspective 327  
*Pennie Frow, Janet R. McColl-Kennedy, Toni Hilton, Anthony Davidson,  
Adrian Payne and Danilo Brozovic*

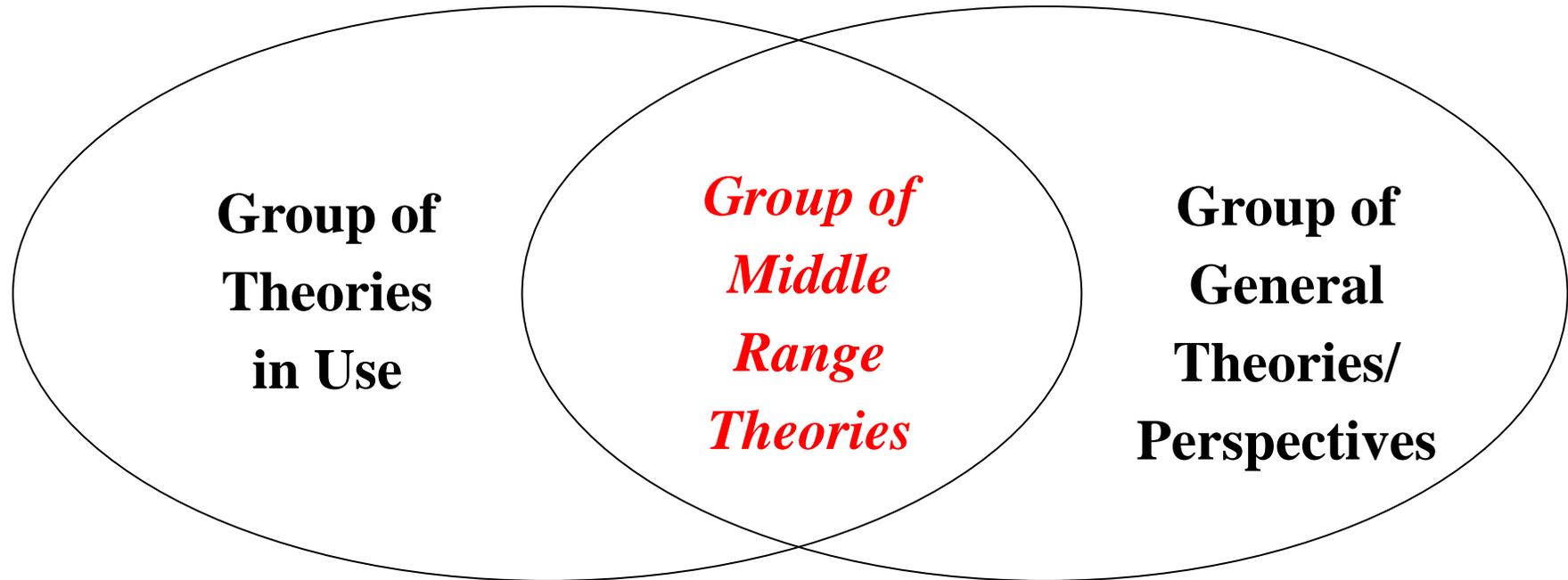
*“S-D logic is **a meta-idea** and has been developed as a framework of **high level of abstraction** so it can provide a **foundation for a general theory**”*

*To advance the S-D logic what is also needed is the development of **mid-range theory and frameworks that bridge theory with practice** thus allowing for **empirical investigation**”*



**Empirical Domain**  
*practical knowledge*

**Theoretical Domain**  
*theoretical knowledge*



**Group of  
Theories  
in Use**

***Group of  
Middle  
Range  
Theories***

**Group of  
General  
Theories/  
Perspectives**

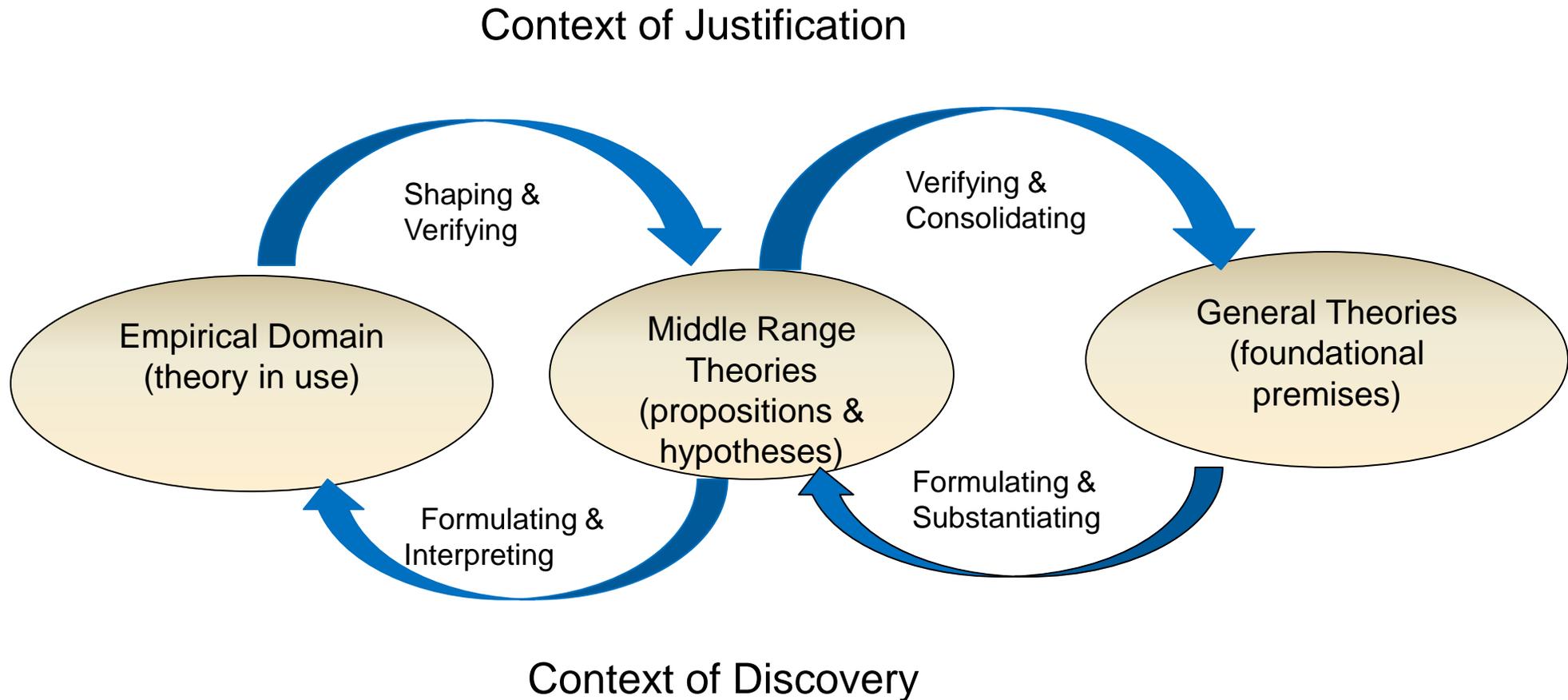
*managers, customers & other stakeholders **understanding of empirical phenomena**, mental models that are **context specific & not formally expressed***

*theories are less broad in scope & focus on specific phenomena, **bridge gap between general theory & empirical observation***

*perspectives framed at a conceptual level that is broad in scope and integrative & **beyond the ordinary range of perception***

# Bridging role of Middle Range Theory

(Brodie et al. 2011)



1 MOTIVATION

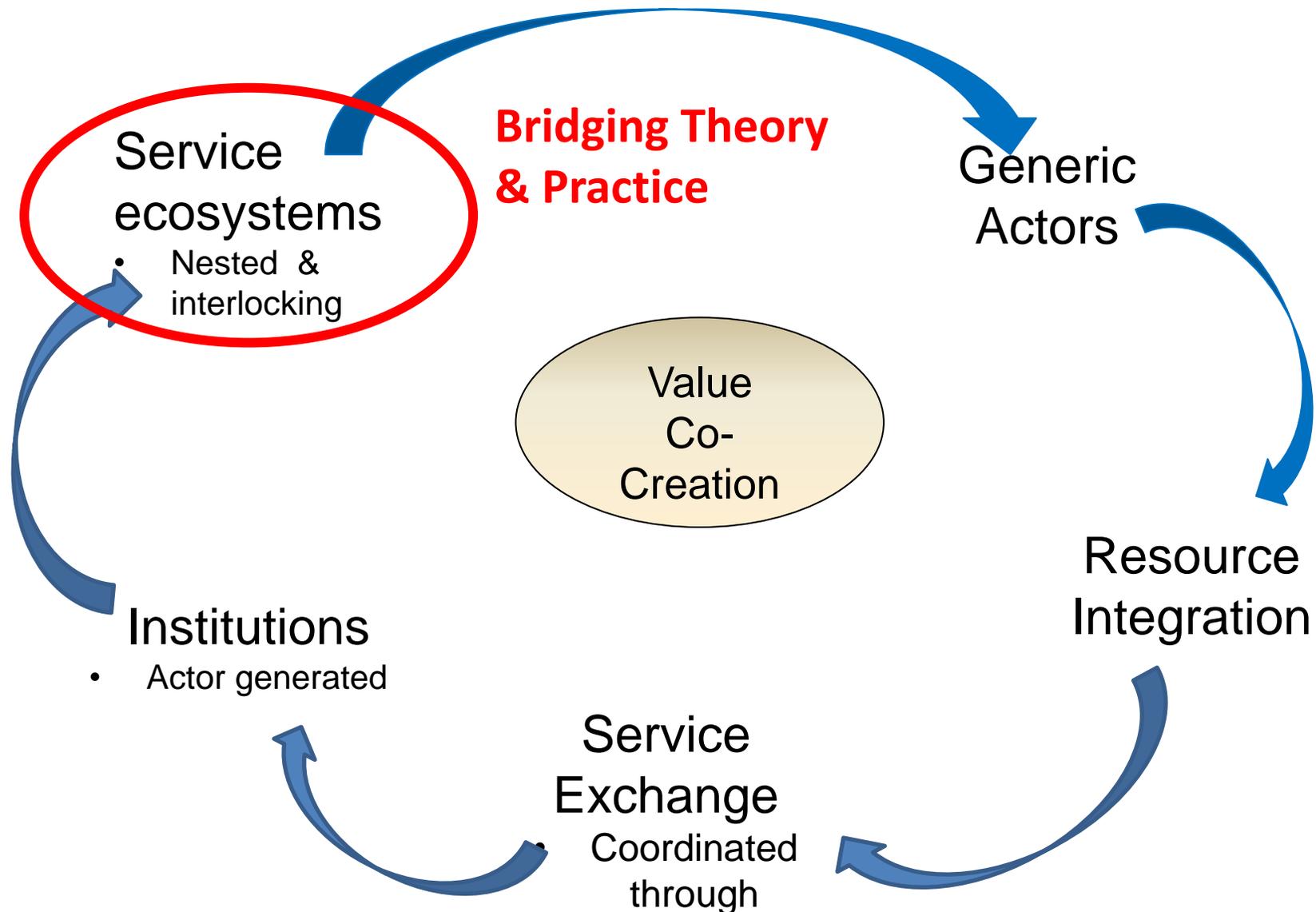
**2 WHY ECOSYSTEM?**

3 WHY ENGAGEMENT?

4 WHY ENGAGEMENT PLATFORMS?

5 WHY PLATFORM ARCHITECTURE?

# Core Narrative & Process of Service-Dominant Logic (Vargo 2014)



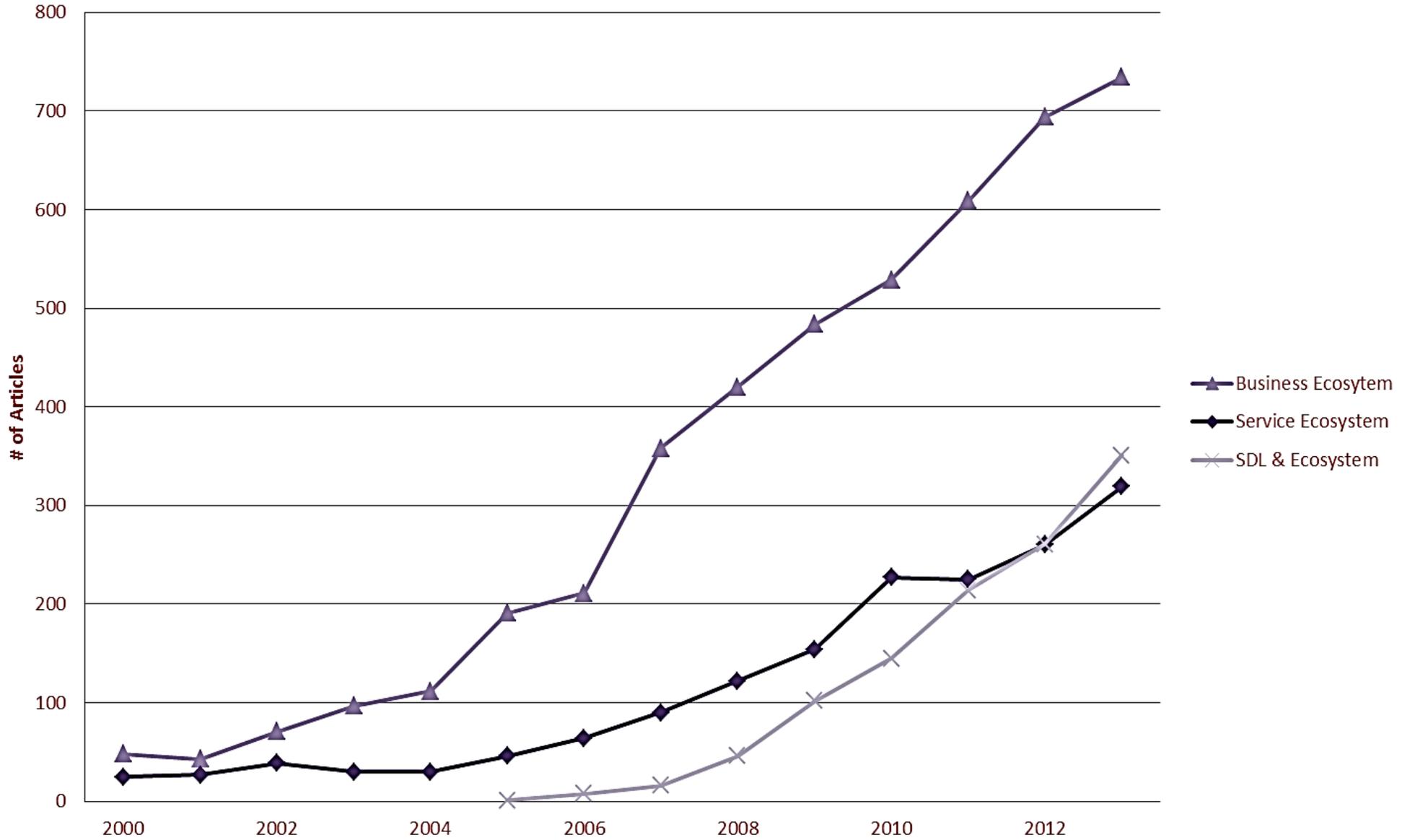
# “Ecology and Competition” Moore 1994 HBR

“.....I suggest that a company *not be viewed as a member of a single industry* but as ***part of a business ecosystem that crosses a variety of industries.***

.....companies ***co-evolve*** capabilities around a new innovation:

.....they work ***cooperatively*** and ***competitively*** to support new products, satisfy customer needs”

# Google Scholar entries

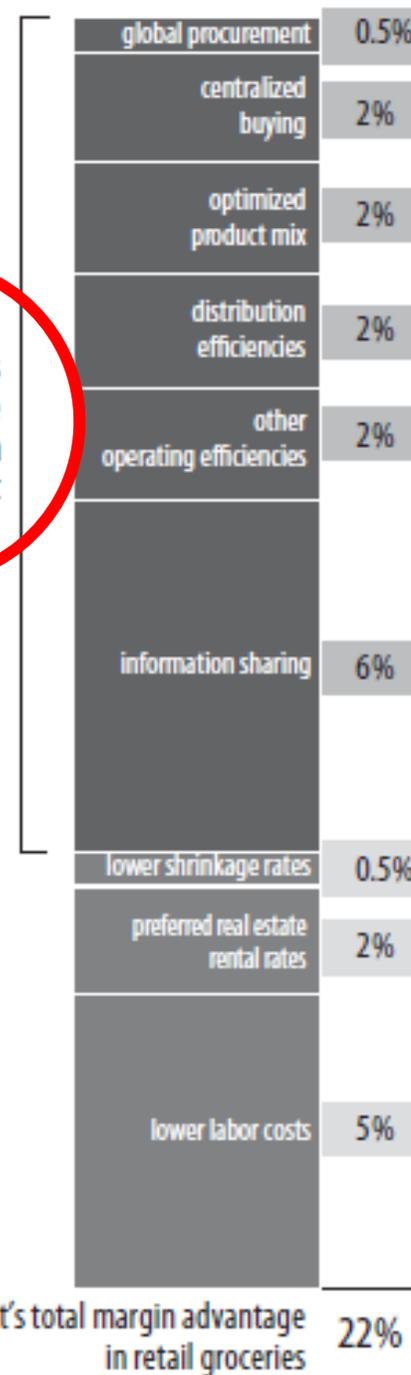


# Ecosystem edge

Iansiti and Levien (2004)

65%

benefits attributable to ecosystem management



# Is the Biological Metaphor Useful? (Mars et al 2014)

## Biological Ecosystems

- always emergent
- not always healthy, functional and persistent
  - stability dependent on keystone species
  - interaction linked by flows of resources & information
- species can be specialized or generalized
- nestedness arises within networks of species interaction
  - resiliency & collapse when removed

## Business Ecosystems

- most cases emergent
  - organizations trying to do more system-wide design
- not always healthy, functional and persistent
  - stability dependent on keystone actors
  - interaction linked by flows of resources & information
- actors can be specialized or generalized
- nestedness arises within networks of actor interaction
  - resiliency & collapse when removed

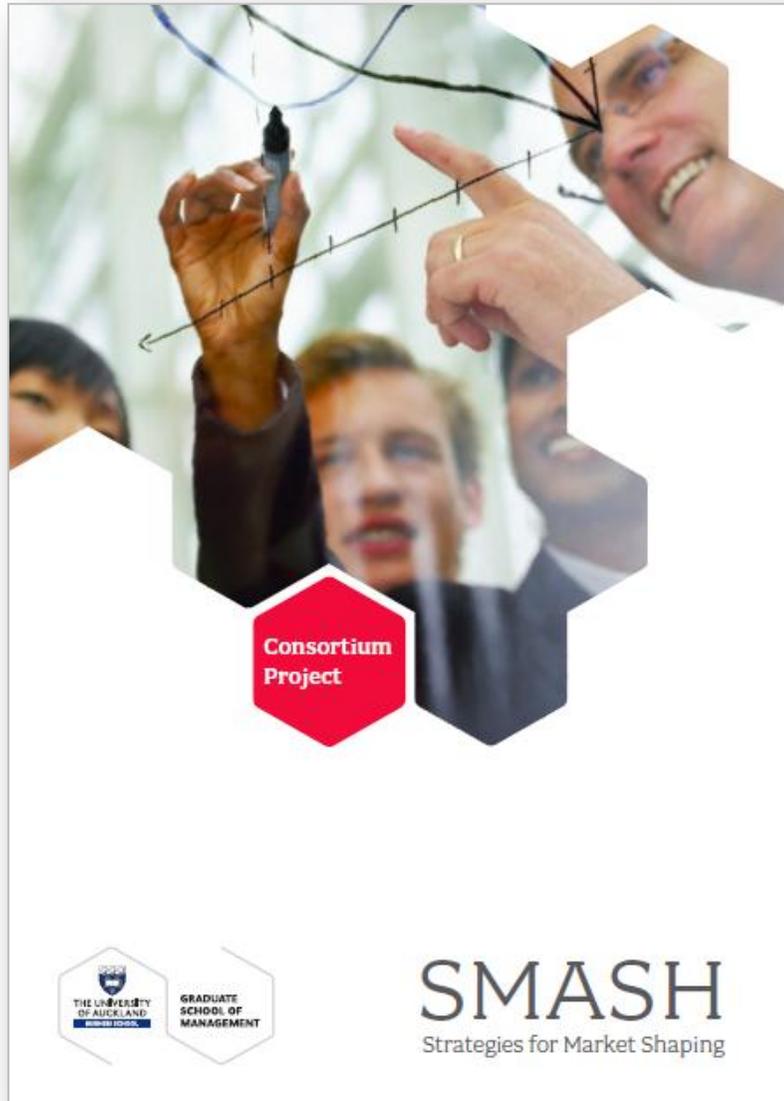
# Service ecosystems as complex adaptive systems

Vargo and Lusch (2011)

*“a spontaneously sensing and responding spatial and temporal structure of largely loosely coupled, value-proposing social and economic actors interacting through institutions, technology, and language to (1) co-produce service offerings, (2) **engage in mutual service provision**, and (3) co-create value.”*

*a relatively **self-contained, self-adjusting system of resource-integrating actors** that are **connected by shared institutional logics** and **(engaging) mutual value creation** through service exchange*

# SMASH consortium in a nutshell



## Research with managers::

- 9 firms from 9 industries
- 34 executives
- 2.5 workshops days, 8 months
- 32h of in-depth groups interviews



BLUNT



FletcherBuilding



NEW  
ZEALAND  
POST  
GROUP

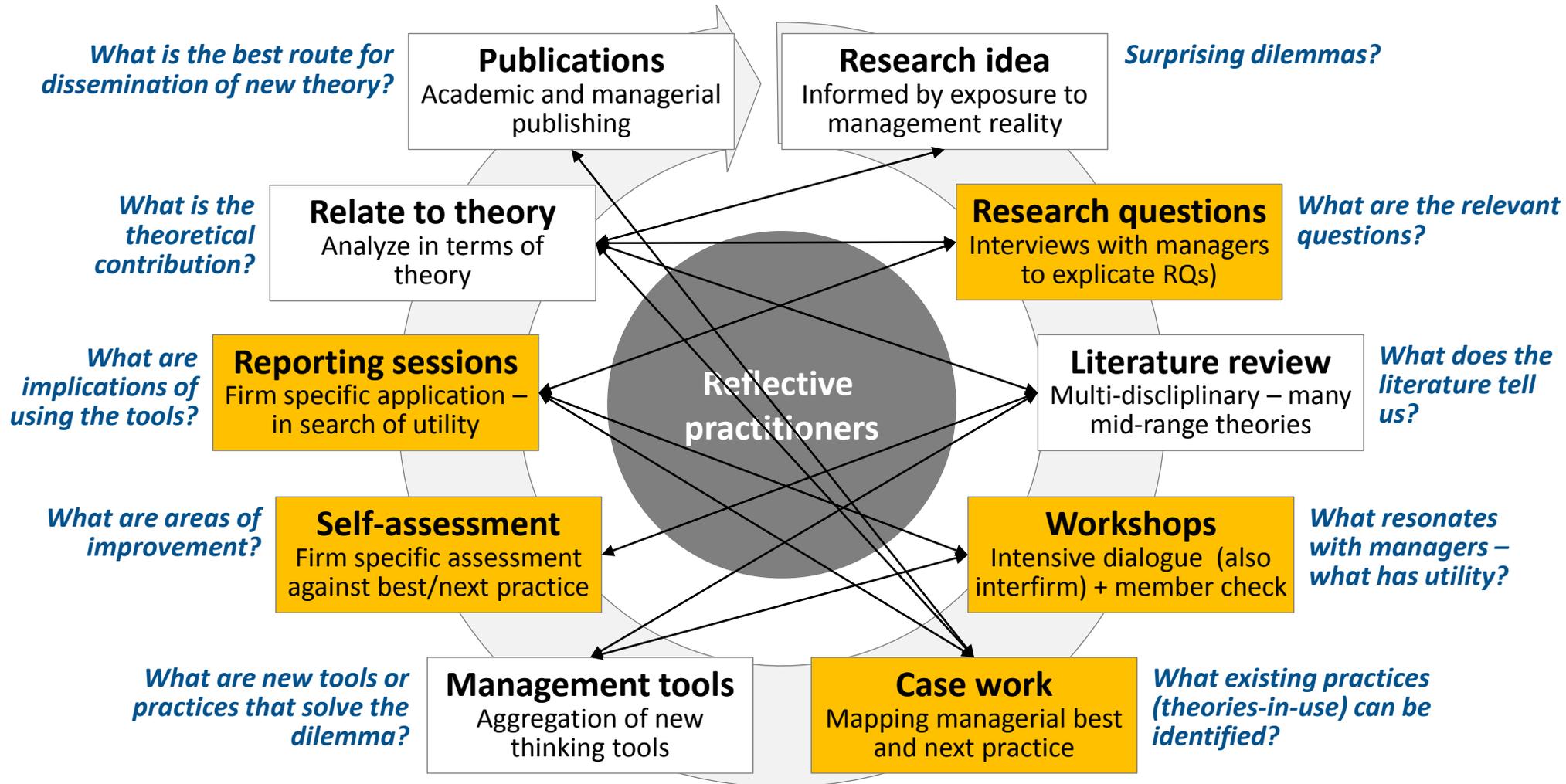


## Reversed logic:

- First managerial outputs:
  - 25 tools for strategy processes
  - 9 primary data case studies
  - 54 secondary data case examples
- Pure academic research after this

# Consortia based research

## Theorizing *with* managers



# Six characteristics of **market** ecosystems

## Markets as complex adaptive systems

1

Market ecosystems are results of both **emergence** and **purposeful design** efforts by individual actors

2

Ecosystems develop towards **stasis** – a period or state of static balance or equilibrium during which little change occurs

3

Market ecosystems are **self-organizing** - capable of generating order

4

The mechanism for emergence and stasis is based on both **positive and negative feedback** - what works gets stronger and what does not work gets weaker

5

Periods of stasis are **punctuated by sudden shifts and radical change** (punctuated equilibrium)

6

The stability of market ecosystems is dependent on **keystone actors** - that are central to the system or have extensive clout

1 MOTIVATION

2 WHY ECOSYSTEM?

**3 WHY ENGAGEMENT?**

4 WHY ENGAGEMENT PLATFORMS?

5 WHY PLATFORM ARCHITECTURE?

# Why 'engagement'?

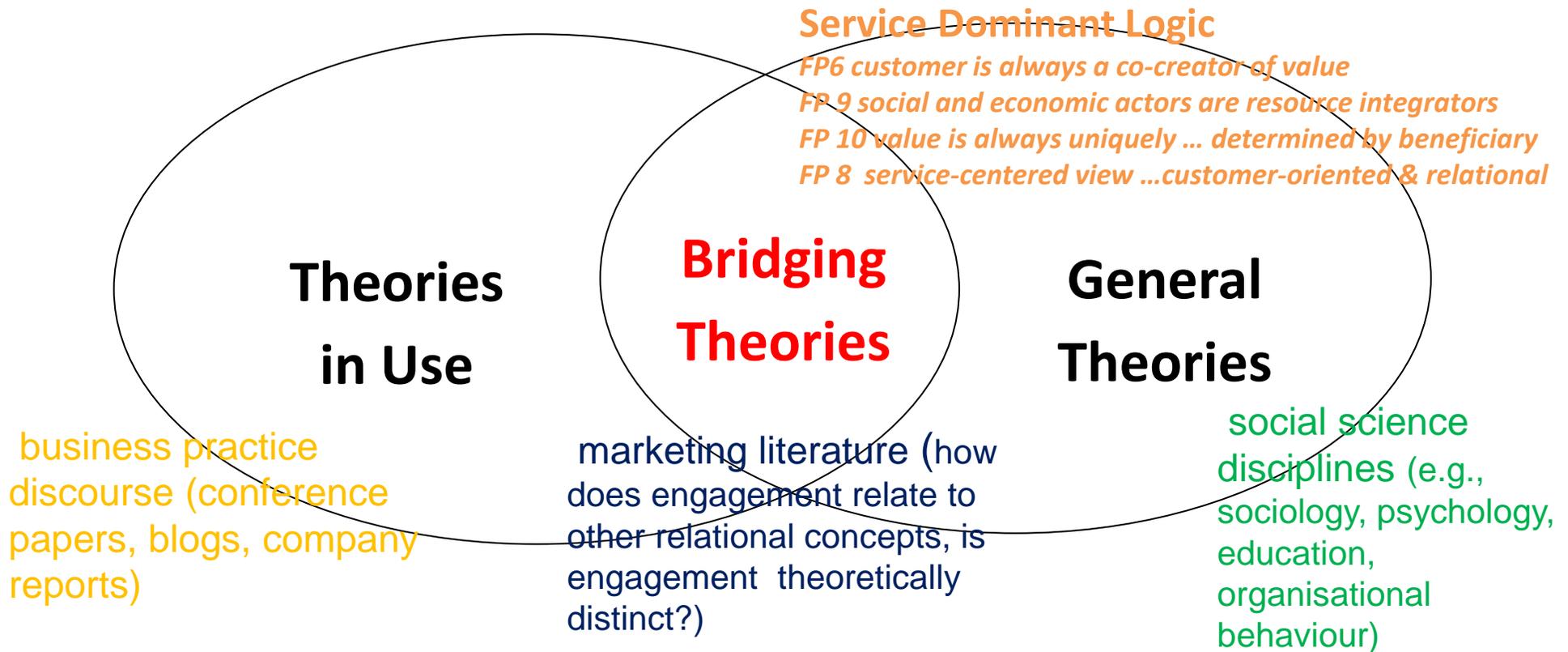
*Practicing manager had little understanding of the abstract concepts concept of value co-creation, operant resources and resource integration.*

*Concrete concepts of 'engagement', 'engagement platform' and 'platform architecture' aligned to the actionable language of business practice.*

# Defining the conceptual domain of customer engagement (JSR 2011)

**Empirical Domain**

**Theoretical Domain**



# From Customer to Business Engagement?

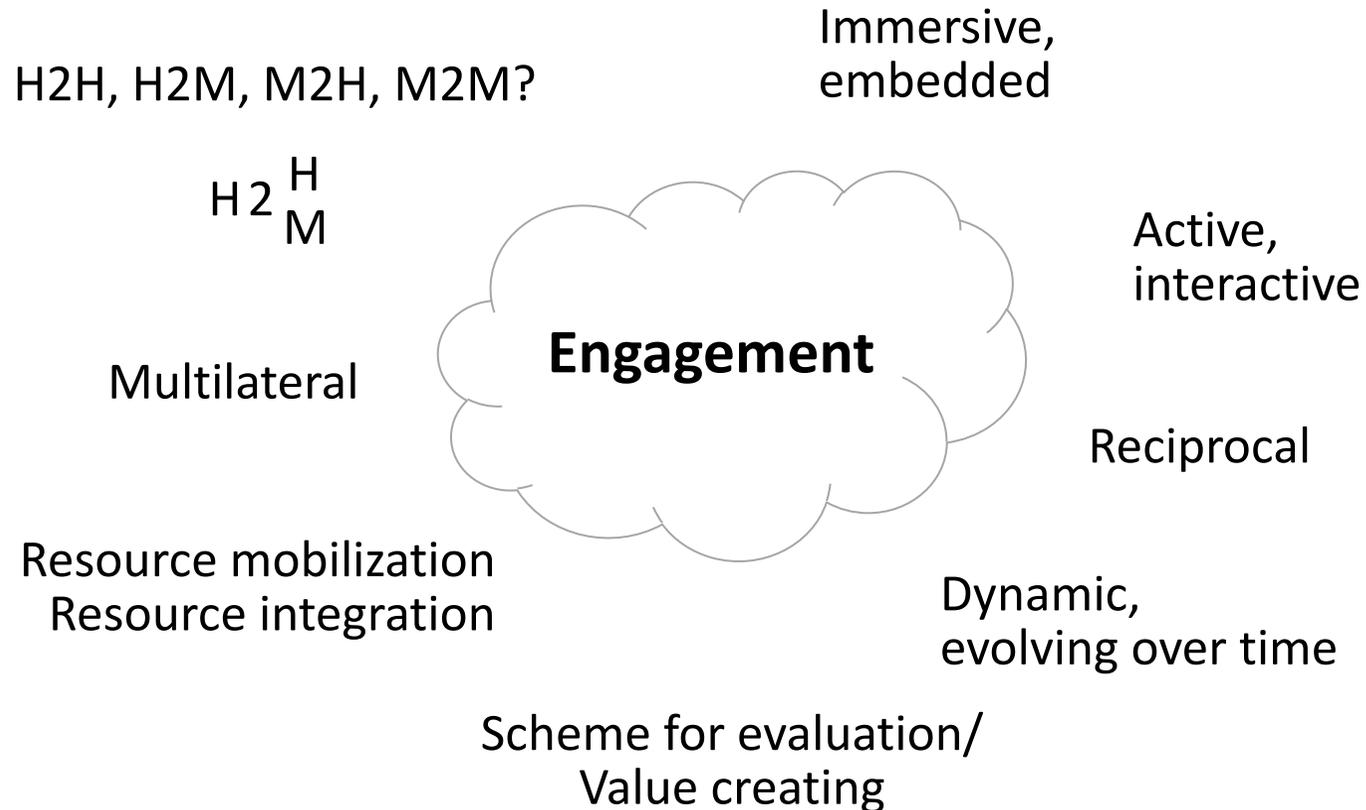
Brodie, Hollebeek, Juric, Ilic (JSR 2011)

Definition based on 5 propositions

1. ....psychological state, which occurs from *interactive experiences* within business networks
2. ....occurs within a *dynamic, iterative process* of business networks that *co-creates value*
3. ....plays *central role* within a *social/* network of relationships
4. ....is a *multidimensional concept* (cognitive, emotional and behavioral dimensions)
5. ....different conditions lead to differing *levels of engagement*

Engagement is **conceptually distinct** from participation and involvement because *they don't explicitly embody interactivity and experience*

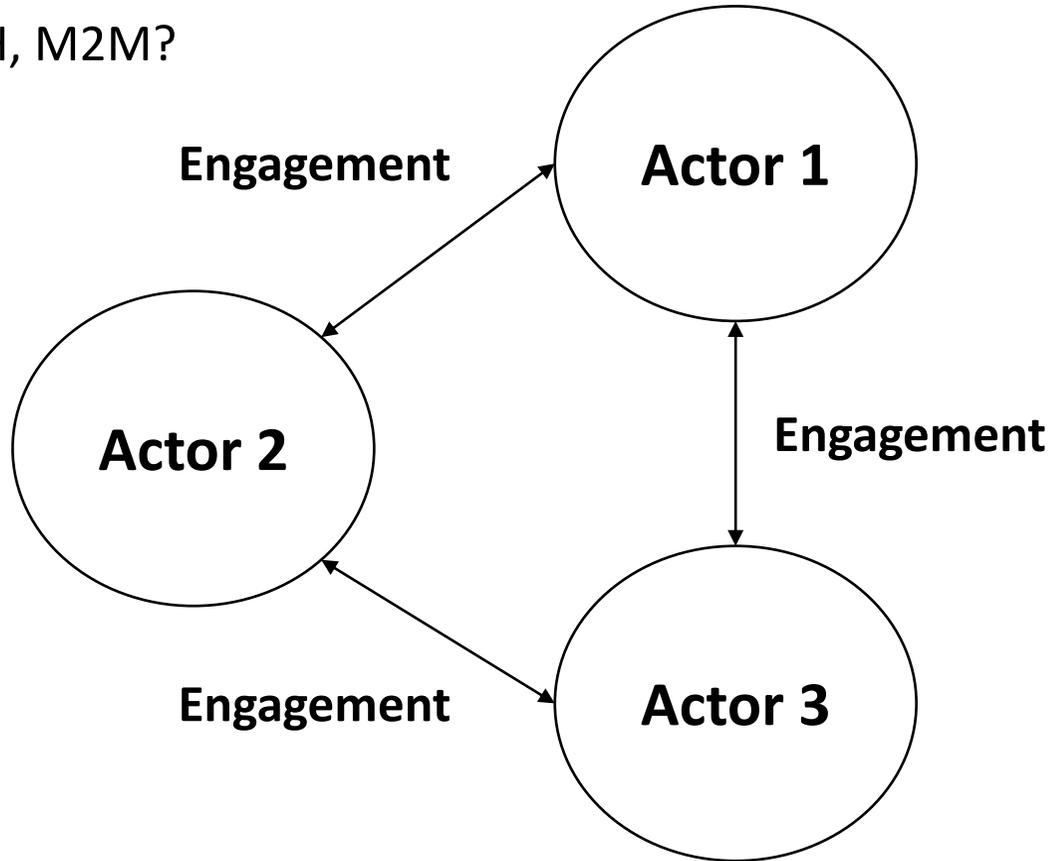
# But business engagement is more



# From dyads to triads to patterns

H2H, H2M, M2H, M2M?

H<sub>2</sub><sup>H</sup><sub>M</sub>



1 MOTIVATION

2 WHY ECOSYSTEM?

3 WHY ENGAGEMENT?

**4 WHY ENGAGEMENT PLATFORMS?**

5 WHY PLATFORM ARCHITECTURE?

# Why engagement platforms?

- Effective value co-creation (resource integration) is dependent on a “*platform for actors to engage*”
- Consists of *multiple touch-points* made up of a combination of:
  - virtual & physical interactions
  - human & machine interactions

# The fundamentals of engagement platforms

(Ramaswamy, 2009)

**D**

Dialogue

- Deep understanding of other actors' perspectives
- Active involvement and dialogue
- Let other actors engage the way they want
- Co-creation of meanings and experiences

**A**

Access

- Experience value through other means than ownership of products – from ownership of to access to
- Become embedded in each others' processes – help other actors to integrate own resource with market-facing resources
- From relieving customers to enabling customers

**R**

Risk

- Other actors should be supported in their risk-reward assessments
- Help other actors to 'de-risk' their decisions
- Demands increased level of information availability

**T**

Transparency

- Trust cannot be built without information transparency
- Other actors will not share vital information without trust
- Firms must open up processes for participation by other actors
- Collective accountability for mutually beneficial decisions

# Different kinds of engagement platforms exist

	Electronic application	Tool / product	Event / physical space	Process	Personnel group
Platform as a business	<ul style="list-style-type: none"> <li>• Facebook, YouTube</li> <li>• Last.fm, eBay</li> <li>• Threadless</li> <li>• MS Health Vault</li> <li>• Hitlantis</li> </ul> 	<ul style="list-style-type: none"> <li>• Medtronic</li> <li>• Fitbit</li> </ul> 	<ul style="list-style-type: none"> <li>• Coffee houses</li> <li>• Night clubs</li> </ul> 		
Platform as an enabler	<ul style="list-style-type: none"> <li>• MyStarbucksIdea</li> <li>• WreckAMovie</li> <li>• P&amp;G BeingGirl</li> </ul> 	<ul style="list-style-type: none"> <li>• Kone maintenance network tools</li> <li>• iOS Developer tools</li> <li>• Galeries Lafayette</li> </ul> 	<ul style="list-style-type: none"> <li>• Unilever headboxers</li> <li>• T-mobile sing along Trafalgar Sq.</li> <li>• Forestcluster InnoLabs</li> <li>• IKEA</li> </ul> 	<ul style="list-style-type: none"> <li>• Cleveland Clinic</li> <li>• P&amp;G Connect and Develop</li> </ul> 	<ul style="list-style-type: none"> <li>• Media houses / user generated content support</li> <li>• Schlumberger</li> <li>• Intuit</li> </ul> 

# Engagement Platforms & Ecosystems

( Briedbach et al. 2014)

## Illustrative Case : Google Stores



# Google's Engagement Platforms



*App  
Marketplace*



*Physical Stores*



*Devices*



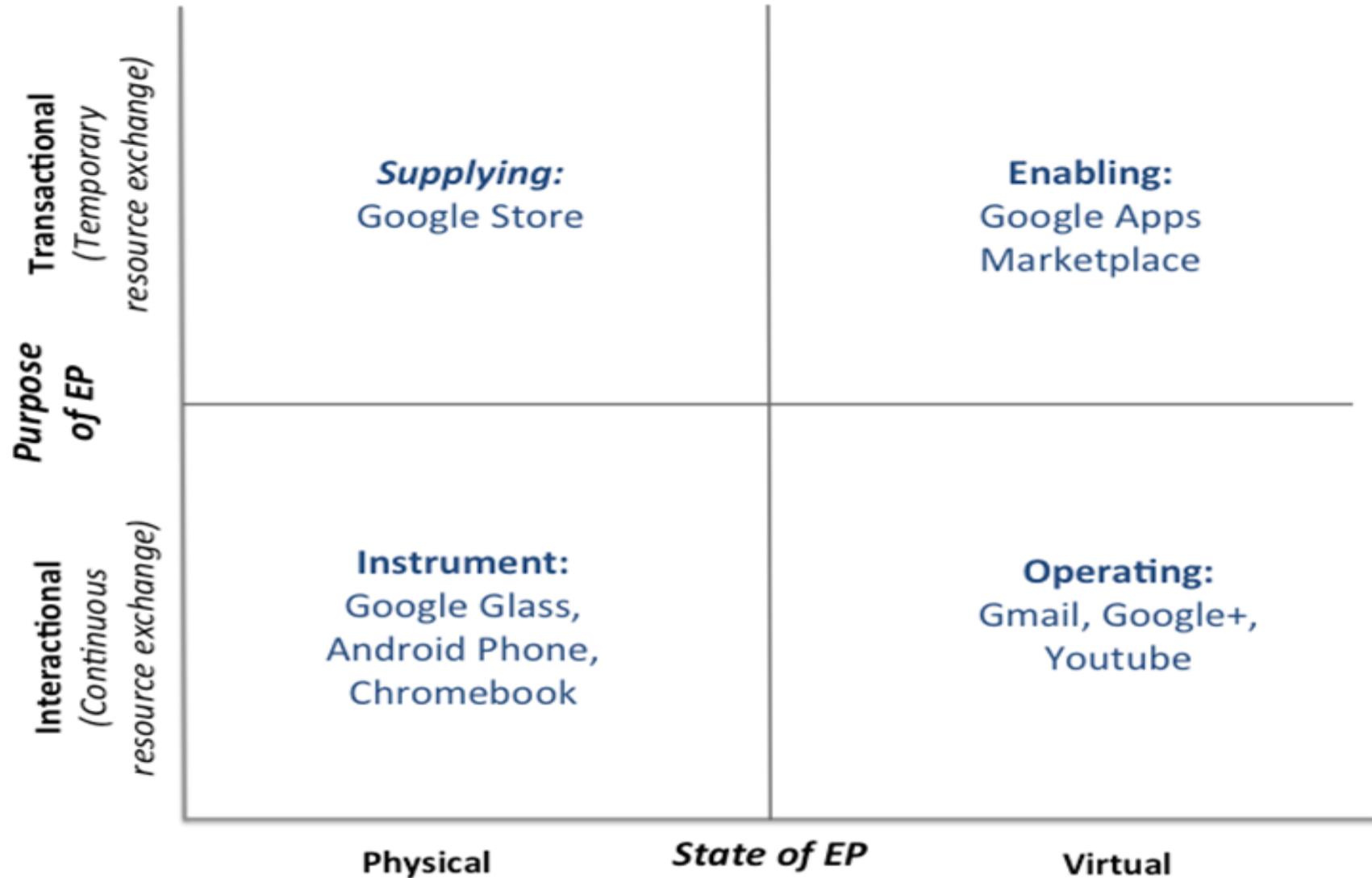
*Online Services*



ANDROID

*Operating Systems*

# Google's Engagement Platform



1 MOTIVATION

2 WHY ECOSYSTEM?

3 WHY ENGAGEMENT?

4 WHY ENGAGEMENT PLATFORMS?

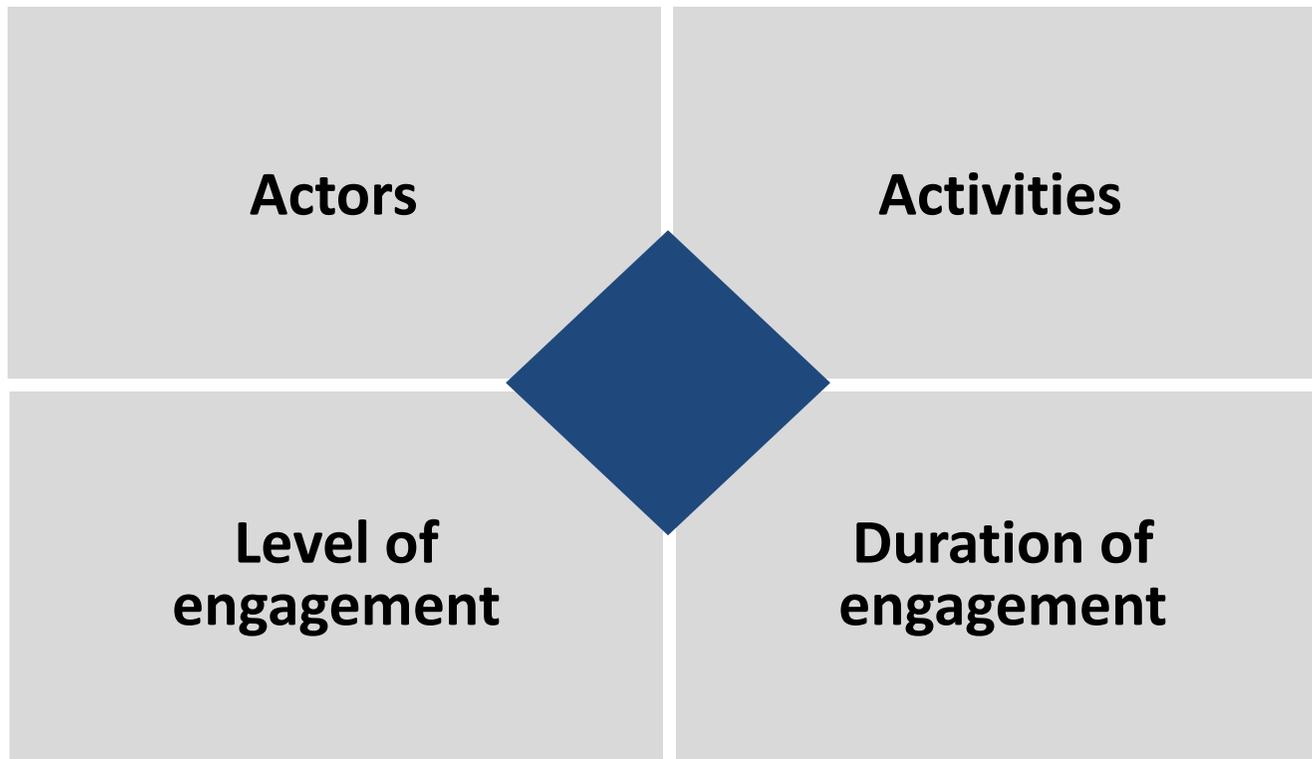
**5 WHY PLATFORM ARCHITECTURE?**

# Why platform architecture?

(Baldwin and Woodard, 2008)

- ‘Platform architecture’ is a **modularization** which partitions the system into:
  - a set of components whose **design is stable** and
  - a complementary set of components which are allowed—indeed encouraged—to **vary**
- Combination of stability and variety is accomplished via “**stable, yet versatile**” **interfaces**, which govern the interactions of components:
  - interface specifications are **part of the platform**;
  - indeed they **may be the only elements that remain truly stable** over long periods of time.

# Example platform architecture components



# Research questions

## Engagement

- How do we conceptualize A2A engagement within service systems?
- What is effective engagement (antecedents and consequences)
- When is the dyad not enough as a lens for analysis and design?

## Patterns

- What are effective patterns of engagement within service systems?
  - What are the patterns that we found in a set of cases?
  - How do we characterize these patterns?
  - How do we use these patterns to design service systems ?

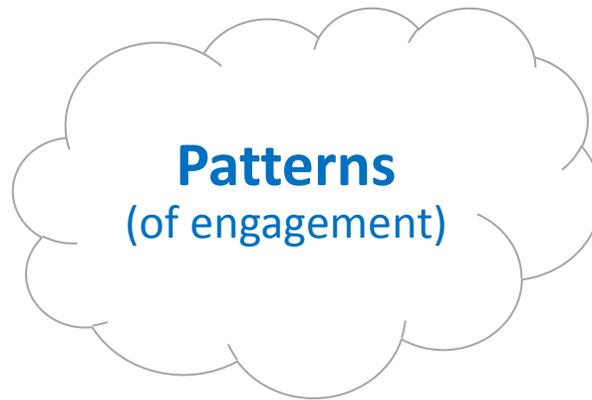
## Implications

- How do you design engagement platforms using patterns of effective engagement?
  - Do you need an engagement platform?
  - How do you find out what you already have (in terms of EP)?
  - What kind of EP is useful and doable in specific situations and contexts
- EEPA: Effective Engagement Platform Assessment – tool 😊

Template for design

Regularity

Template for solving  
a specific problem



Repeatable,  
without being  
standardized

Capabilities  
and resources

Structure (components)  
and behaviour (action)

**4<sup>th</sup> Forum for Markets and Marketing, FMM2014**

June 16-19, 2014, Karlstad, Sweden

# **Patterns of Engagement within Service Systems**

Rod Brodie, Suvi Nenonen, Kaj Storbacka,  
Tilo Böhmann, Paul Maglio

