



# Value Co-Creation in the Digital Era

















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### Value Co-Creation in the Digital Era

Thursday August 24, 2017 | 12:15 PM - 03:00 PM

















#### SPEAKERS

- Kyoichi Jim Kijima
   Professor Emeritus
- 2. Jan Segerstam
  Development Director
- 3. Mervi Huhtelin Senior Specialist
- 4. Sanna Ketonen-Oksi Researcher
- 5. Marja Toivonen Adjunct Professor
- 6. Eveliina Saari
  Senior Researcher















#### OBJECTIVE

- In this webinar we explore the premises and promises of value co-creation by focusing on
  - Value creation processes,
  - Platforms, and
  - Service innovations.



28.8.2017







# Value Orchestration Platform and Its Ecosystem



#### Kyoichi Jim Kijima

Professor Emeritus, Tokyo Institute of Technology Specially-Appointed Professor, Daito Bunka University

#### Contents

- 1. Value Orchestration Platform Business Model
  - Two-layered Service System Model
- 2. Strategies for Orchestrating Value Co-creation
  - Example of Rakuten
- 3. Sharing Economy and Algorithm Revolution
  - A Special Case of Platform Economy
- 4. Value Orchestration Platform and Its Ecosystem
  - Inter-related Network and Sustainable Development
  - Lessons from Rakuten and Amazon







# 1. Value Orchestration Platform Business Model

### Value Orchestration Platform Business Model

- Shopping Mall and credit cards
- ECs such as Amazon, Ebay and Rakuten
- App store and iTunes
- Sharing Economy including Uber and AirBnB

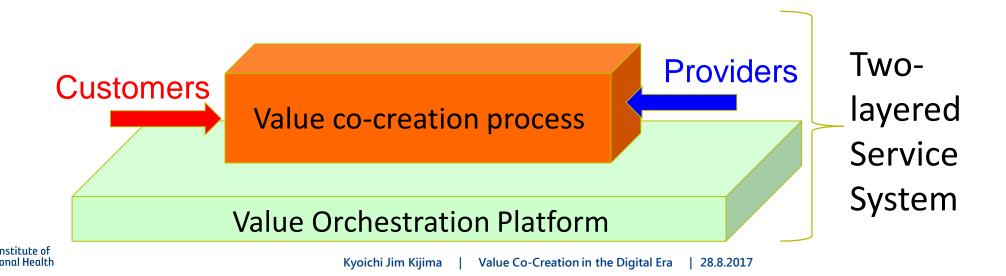


Have a common business model



#### Value Orchestration Platform Business Model

They play a role of Value orchestration platform that orchestrates and facilitates value co-creation by customers and providers.



### Two-layered Service System

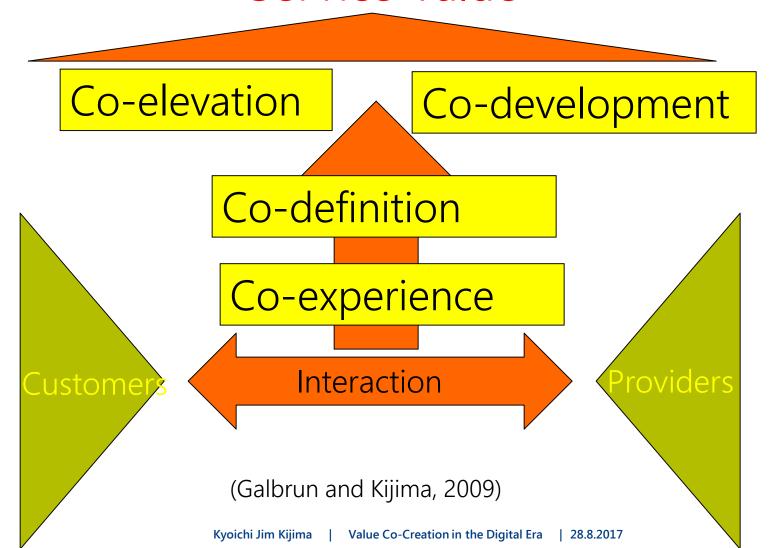
- In the value co-creation process customers and providers interact each other and co-create new value.
- The value orchestration platform invites customers and providers to "get on board" and facilitates the process and leaves the control entirely to providers and sometimes to customers as well.



#### Four-phase Model of Value Co-creation

Occupational Health

Service Value



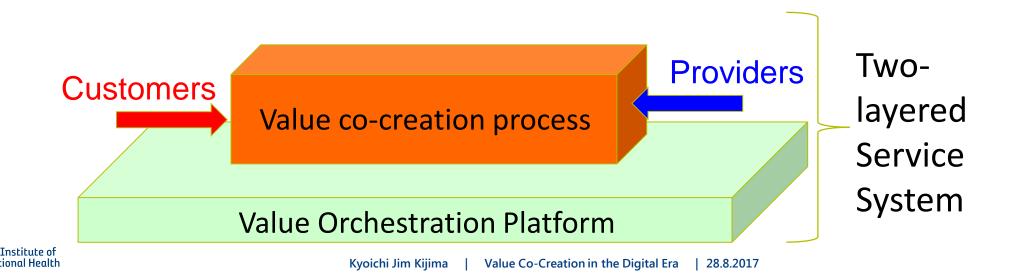
### Two-layered Service System

- In the value co-creation process customers and providers interact each other and co-create new value.
- The value orchestration platform invites tens of millions of customers and tens of thousands of providers to "get on board" and facilitates the process and leaves the control entirely to providers and sometimes to customers as well.



#### Value Orchestration Platform Business Model

They play a role of Value orchestration platform that orchestrates and facilitates value co-creation by customers and providers.



## Matching Business: They orchestrate value without possession of the goods

Business	Platform	Customers	<b>Providers</b>
Shopping	Shopping Mall (real)	consumers	tenants
Credit Card	VISA	Buyers	Merchants
Electronic commerce	B2B, B2C exchanges	Buyers	Sellers
Apple App Store	App Store	Users	App Developers
University	University	Students	Faculties

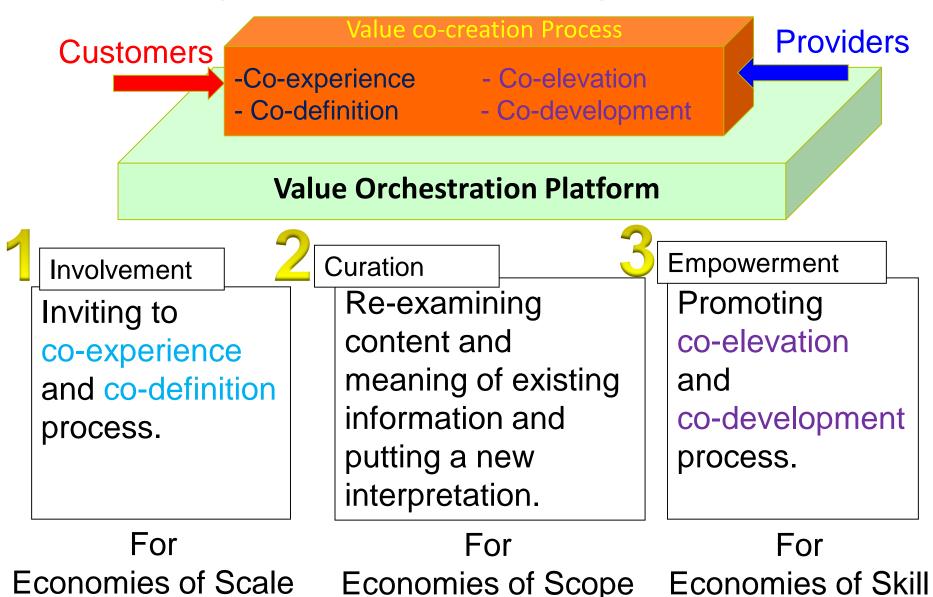






# 2. Strategies for orchestrating Value Co-creation

### Three Management Strategies



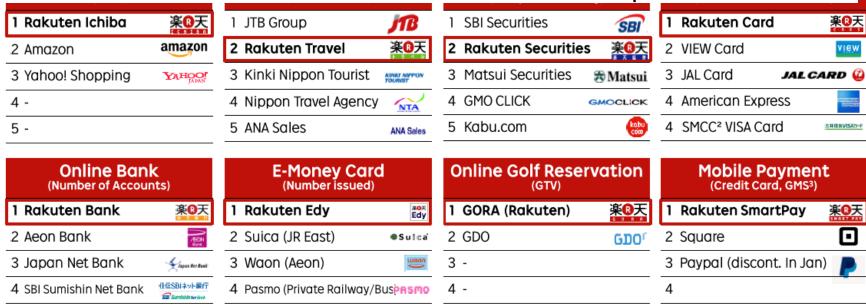


### 1 Involvement Strategies

- The platform orchestrator is primarily interested in how to get appropriate customers and providers "on board" to the platform and to vitalize interactions between customers and providers.
- Strategies for the platform to attract and involve customers and providers in order to maximize the profit is very crucial.



#### Example Rakuten: EC Giant in Japan



Source: Fuji Keizai (2015 B2C GMS), JTA (Apr 2014- Mar 2015 domestic Travel GTV), Company disclosures (12 months ending March 2015 for online brokerage, as of March 2015 for accounts number for online bank, fiscal year ended December 20134for GTV for online golf reservation), Nikkei (April 2014 issued number of e-money cards), SPRING (2015 customer assessment report for credit card), Company estimation for mobile payments

- Rakuten is the largest e-commerce company in Japan, and third largest ecommerce marketplace company worldwide.
- Rakuten is headquartered in Tokyo, with over 10,000 employees from over
   60 countries.
  - In 2015 Rakuten's revenues (net sales) were 713,5 billion yen.



## Rakuten's Involvement Strategy to cope with Amazon

- Attract and lock-in customers by Super Points
  - Membership Business, More than 60 million members
  - Easy-to-use and efficient save of super points for customers in collaboration with Rakuten Credit Card
  - Encourage royalty by ranking
    - Gold, Platinum, Diamond...
  - Main Target Segmentation
    - Female with kids, 30-40 years old
- Differentiation from Amazon
  - Enclosure by Super Points

### 2 Value Curation Strategy

- A highly proactive and selective approach of value orchestration such that
  - (1) it collects, selects, analyzes, edits and reexamines content and meaning of existing products, service and information on customers and providers in order to put a new interpretation on and give a new meaning to them.
  - (2) Based on the newly developed interpretation and meaning, it facilitates value co-creation process involving customers, providers, information and technology.



#### Example: Rakuten

- Differentiation from Amazon
  - "Shopping is entertainment."
  - Amazon: Vending Machine for efficient shopping
- Emphasis on Reasonable Price, Super Points, and Delivery cost
  - User-friendly Rakuten App
  - Charming photos: Not only the items but also with a story



## 3 Empowerment Strategies of Stakeholders

• Customers are empowered by lifting up their aspiration level, while so are providers by referring to their capability of providing service.



## Example: Empowerment of Customers by Rakuten

- They conduct cross business analysis, predict users'behavior and recommend by using a huge super database and AI.
- They employ sophisticated search methods and social media like twitter to deliver useful and customized info for each customer.
- Then, a customer would become more interested in Rakuten, because he/she would know it have anything he/she wants.



## Example: Empowerment of Merchants by Rakuten

- To the merchants they naturally offer insights and "successful strategy" obtained by analyzing the consumers' huge data and using AI and deep learning.
- In addition to that, they empower the merchants by consulting and teaching how to make profit on the platform, which is called ECC (E-commerce consultation).
- Excellent merchant could obtain an award and make use of it for sales promotion.







# 3. Sharing Economy and Algorithm Revolution

A Special case of Platform Economy

#### Accommodations

#### Transportation

Vacation Rental	P2P Rental	Other	RideSharing	Ride Rental	Parking
1 HomeAway	(airbnb	TurnKey	<b>0</b> UBER	***	JustPark
FLIPKEY to Street form		PATHWAY 605	luft	RelayRides	MonkeyParking
HOUSE TRIP	Homestay	tripping	Sidecar	Getaround  BORTBOUND	yourpankingspace"
◊ villas.com	<b>Wimdu</b>	& couch surfing	**shuddle	FLIGHTCAR.	Parking Panda
Bus	siness Shari	ng		Services	
Assets	Outsourcing	Space & Other	Delivery & Meals	Tasks	Financial
HLOOM2 III	Hourly Nerd	● LiQUIDSPACE*	EatWith	н номејоч	<b>#</b> tilt
COHEALO 🎇	<b>QDesk</b>	<b>pivot</b> desk	feastly	TaskRabbit	KICKSTARTER  III LendingClub
@ getable	upcounsel	ShareDesk	.:30	DogVacay	
<b>₩</b> YARDOLUB	**Treelancer.com  CrowdSource**	deliv	POSTMATES  Unstacart	Rover	GUEVARA

PiperJaffray, 2015. Sharing Economy: An In-depth Look at its Evolution and Trajectory across Industries <a href="http://collaborativeeconomy.com/wp/wpcontent/uploads/2015/04/Sharing-Economy-An-In-Depth-Look-At-Its-Evolution-and-Trajectory-Across-Industries-.pdf">http://collaborativeeconomy.com/wp/wpcontent/uploads/2015/04/Sharing-Economy-An-In-Depth-Look-At-Its-Evolution-and-Trajectory-Across-Industries-.pdf</a>.



# Sharing Economy = Platform Economy + Algorithmic Revolution\*

- Sharing Economy or On-Demand Economy is a special case of Platform economy with most advanced algorithm.
  - Uber, AirBnB and more
- IoT, AI, Deep Learning and other buzzwords could be discussed in terms of Algorithmic Revolution.

\*J. Zysman. 2006. **The algorithmic revolution-**--the fourth service transformation. *Communications of the ACM*. 49 (7)



#### Sharing economy is a special case of platform economy

#### Algorithmic Revolution enables:

Direct interaction between the two sides

e.g., Transaction cost down, User-friendliness up, convenience up

Both sides of the platform and are empowered by the platform.

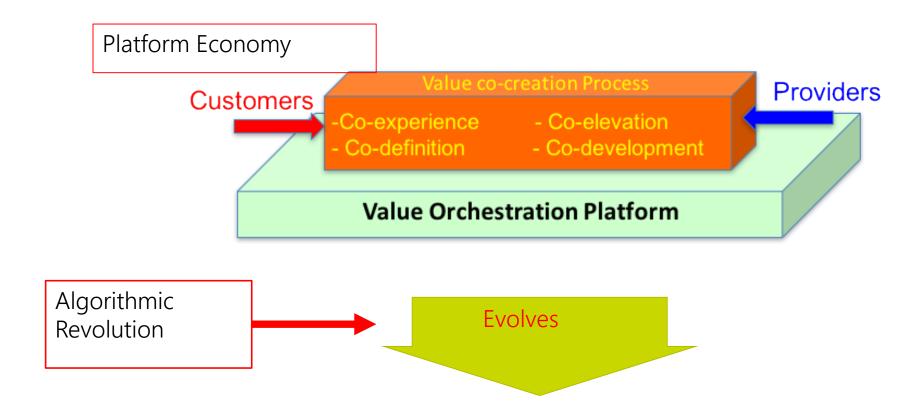
e.g., AirBnB

Price recommendation

Guarantee of reliability, safety and credibility of the both sides



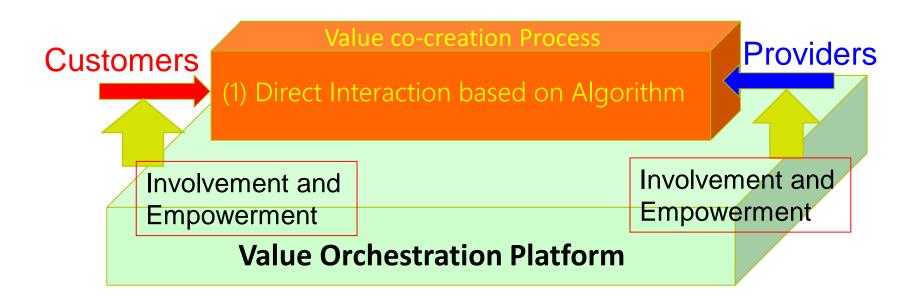
#### Sharing economy is a special case of platform economy





#### Sharing economy is a special case of platform economy

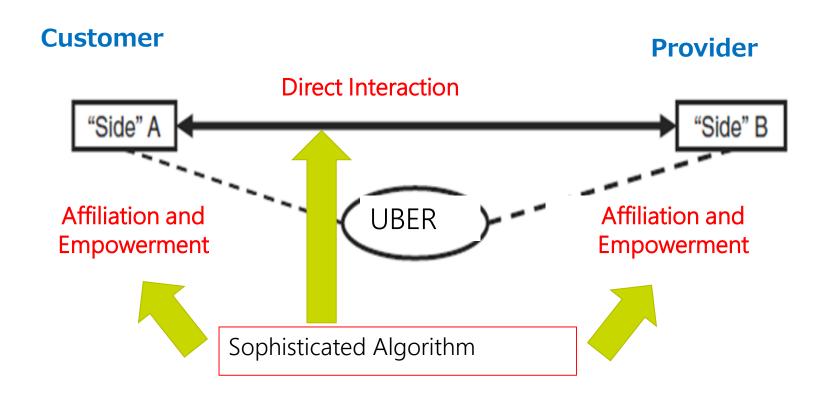
Sharing Economy



(2) Involvement and Empowerment based on sophisticated algorithm



#### Sharing Economy: A Special Case of Platform Economy: Uber



Service Platform + Algorithmic Platform = Sharing Economy





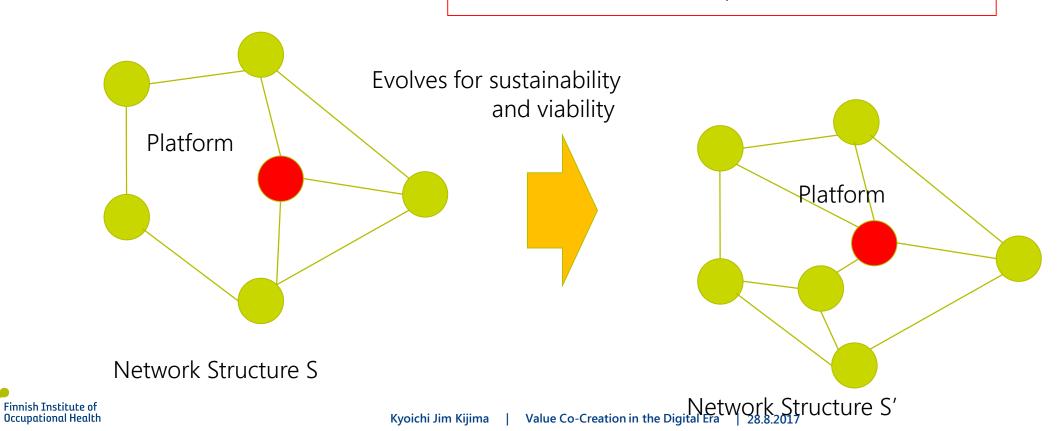


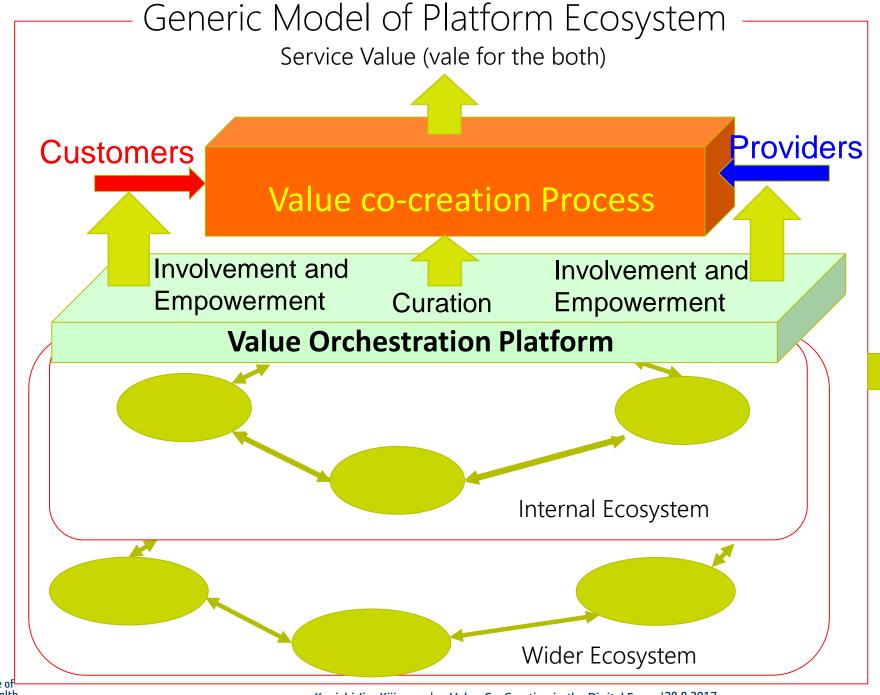


# 4. Value Orchestration Platform and Its Ecosystem

#### Ecosystem in Systemic Perspective

- Network Structure
  - Complementary role network
  - Interrelated-role network
- 2. Dynamic Process
  - **◆**Learning and Evolution
  - ◆Sustainable Development





#### Rakuten's Internal Ecosystem

Rakuten Ichiba, Rakuten Travel, Rakuten Card, Rakuten Bank, and Rakuten Securities supported by Rakuten Super Point

#### **Ecosystem Rewarding Members Using Many Services**

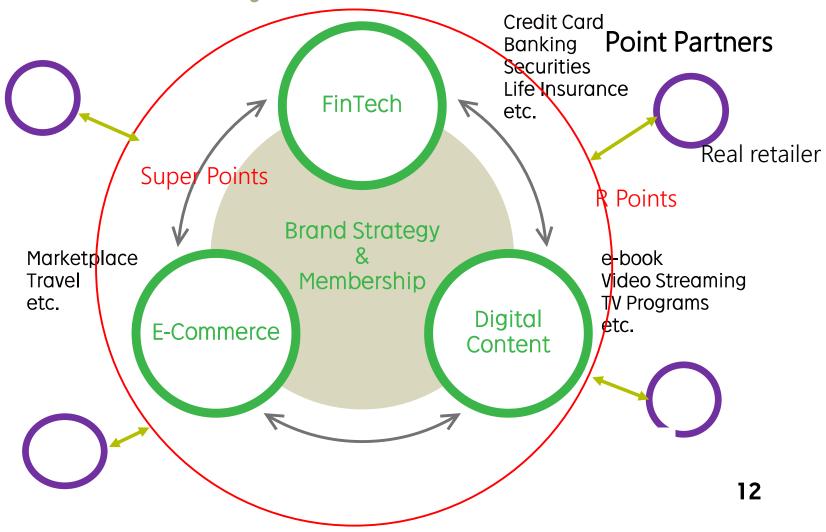




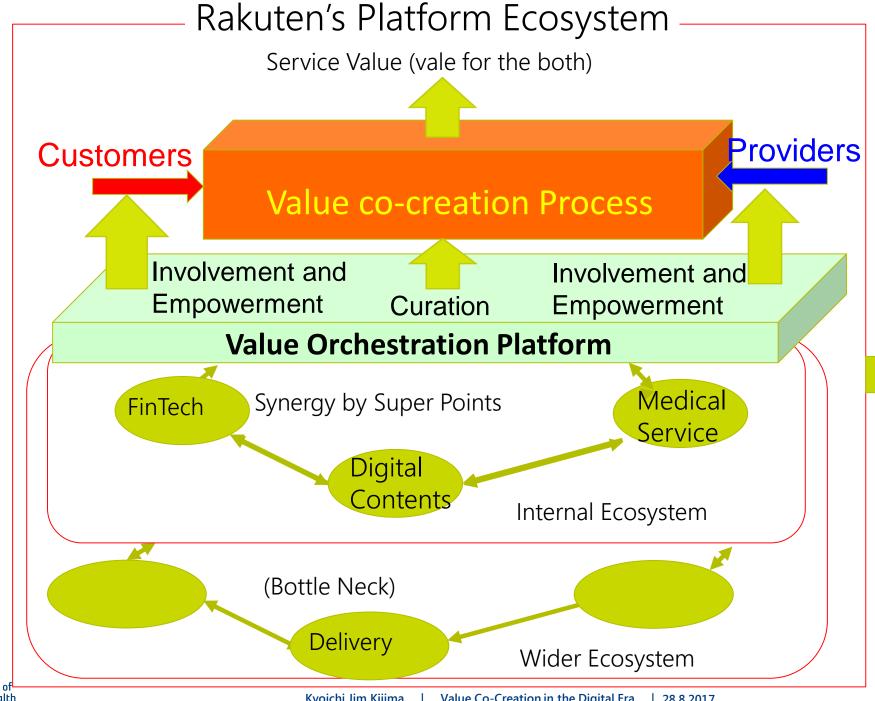
Vision 2020, Rakuten Inc. (2016)

#### Three Pillars of Rakuten Ecosystem

**Rakuten Ecosystem** 







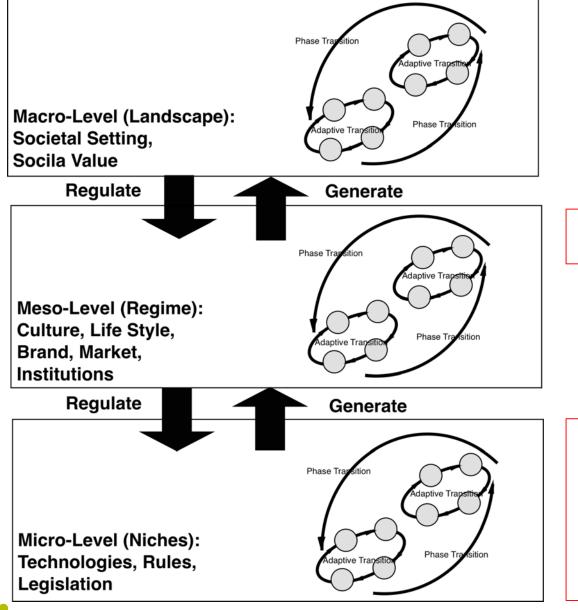
#### Future of Rakuten

- Amazon is too strong as EC champion.
- Rakuten's future heavily depends on ecosystem as a whole.
  - EC itself is not strong enough.
- "Super Points" seems the key way to struggle with adversity by connecting the elements of the eco-system.
  - They push Rakuten Edy, an electronic money changeable to Super Points, available at a wide range of shops, restaurants and others.





#### Framework for Ecosystem Innovation



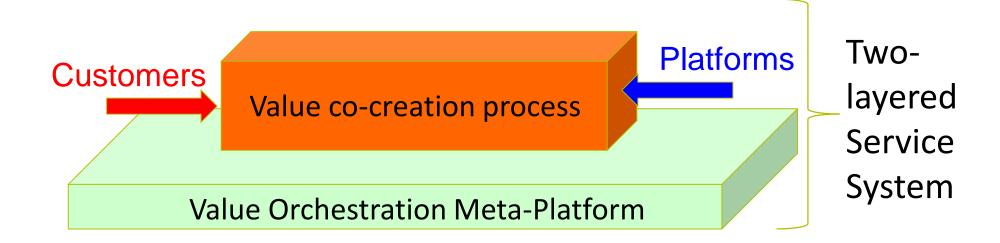
"The more convenient, the better."

-One-stop and instant service

- -Smart Algorithm
- -Sharing Economy
- -Meta-platform

- -Drone,
- -Shortage of human labor power
- -Robotics

#### Meta-Platform Business Model









### Thank you!

kijima@kijima-lab.com

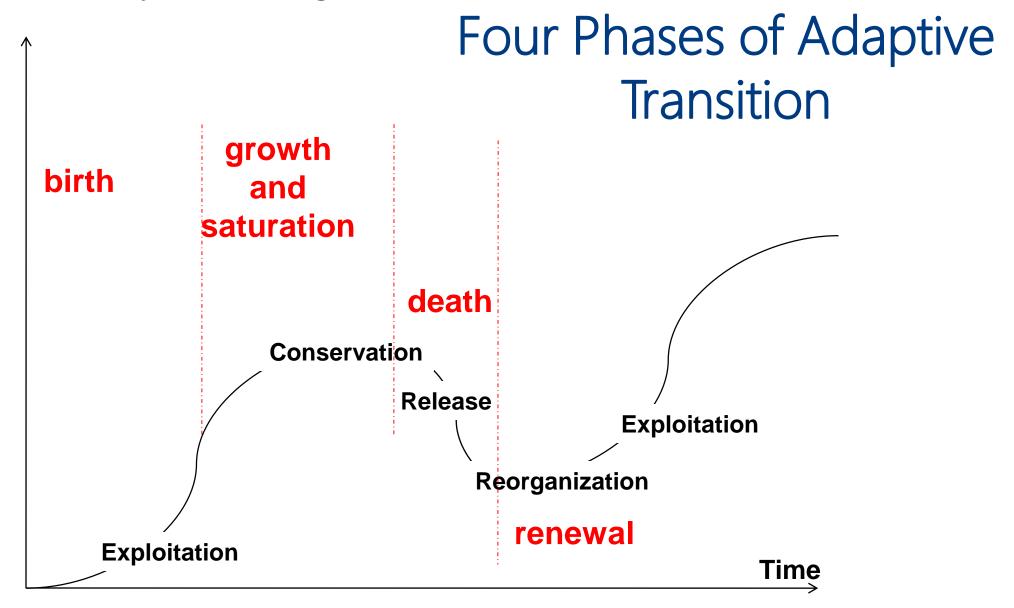


Occupational Health



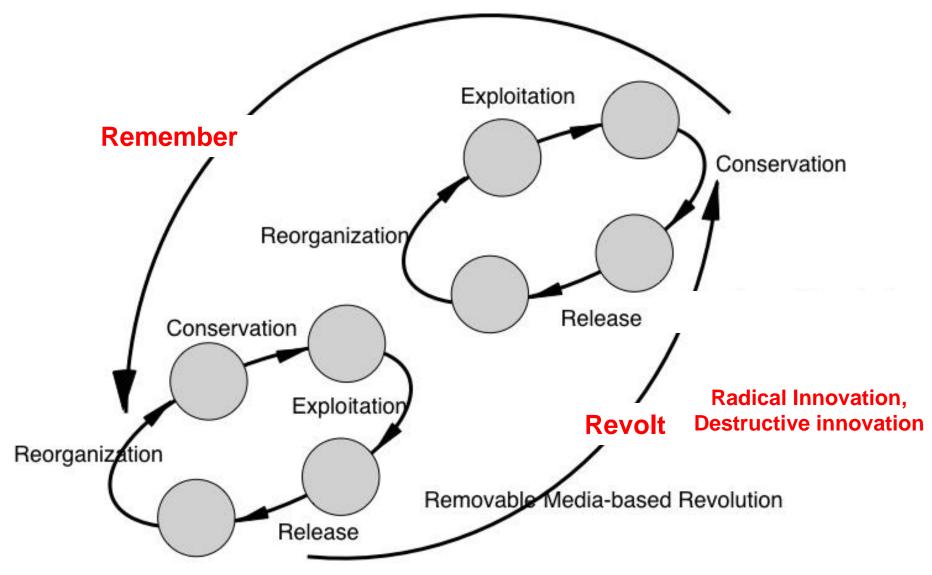
# 5. Adaptive and Structural transition of service system

#### **Level of Systemic Change**



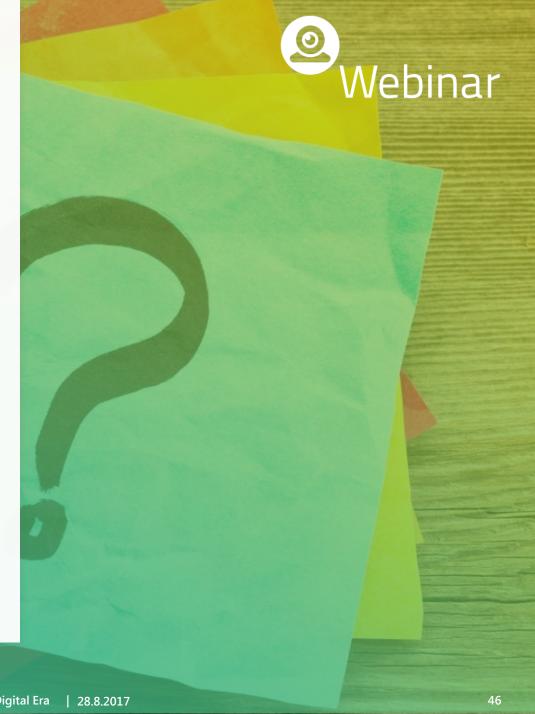


#### Structural Transition





# QUESTIONS AND COMMENTS FOR PRESENTER







## Network Value Creation in Transforming Business Domains

Jan Segerstam
Development Director,
Empower IM Oy

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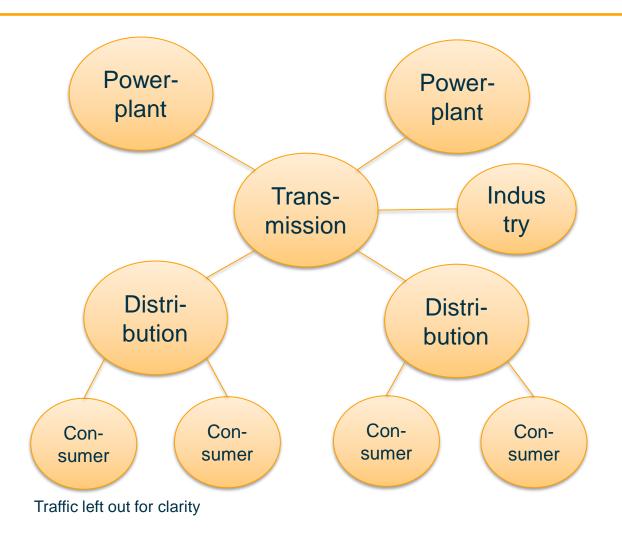


#### **Network Value Creation in Transforming Business Domains**

Jan Segerstam, Development Director, Empower IM Oy 24.8.2017



#### Today's traditional energy system



Large centralized power plants burn fuel to extract energy for resale via a structured network

The network costs are less than the efficiency tradeoff of local fuel logistics and local equipment lifecycle costs

Regulation has opened access to the capital intensive monopolies and created "the liberalized energy market"

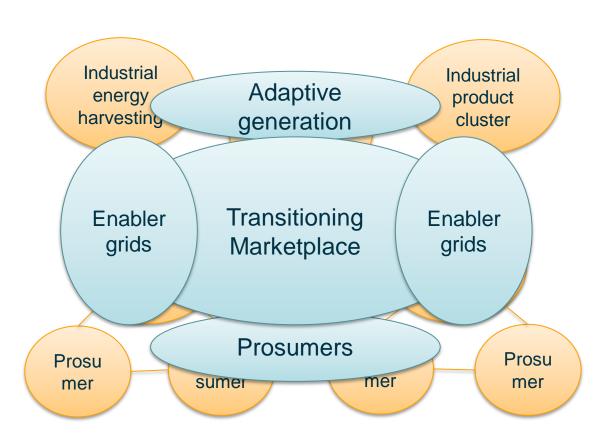


#### Value Co-creation in digitalized energy markets

- How is digitalization transforming the business environment?
- How can digitalization enhance value (co-)creation?
- Why should businesses engage their customers to develop new products and services?
- What is the value of value co-creation?
- What are the limits of co-creation? Is co-creation the key for all kinds of challenges?



#### The Energy System of the Future



Energy is extracted from renewable sources by prosumers and industrially managed sites like wind/solar farms close to controllable loads and connected to dynamic groups to balance needs and overproduction

Network costs are balanced across shared infrastructure and dynamic groups based on actual network needs

Regulation opens access to common infrastructure and allows distributed allocation of resources while promoting open markets on all levels

Electric mobility left out for clarity



#### Value Co-creation in digitalized energy markets

- How is digitalization transforming the business environment?
  - Value is shared and optimized together, not in the background
- How can digitalization enhance value (co-)creation?
  - Channels to information and automated control jump over cost and availability hurdles
- Why should businesses engage their customers to develop new products and services?
  - Value is not in the product, but in the service it performs in the customer's life or business, which the customer understands best
- What is the value of value co-creation?
- What are the limits of co-creation? Is co-creation the key for all kinds of challenges?



#### Value Co-creation in digitalized energy markets

- What is the value of value co-creation?
  - Co-creation combines domain knowledge with value knowledge and allows for discovery of new networked values & opportunities
- What are the limits of co-creation? Is co-creation the key for all kinds of challenges?
  - Co-creation must have a cross-domain or cross-value aspect
  - Co-creation is not training
  - Co-creation is not showing off
  - Co-creation is sharing, not taking



Customer cocreation value

#### Flexible End user Products

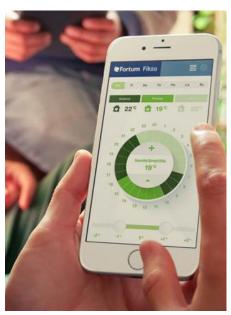
Get clean energy





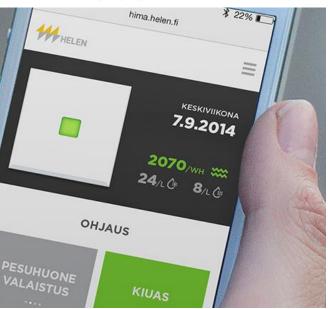
Control and Optimize market use





Control your home







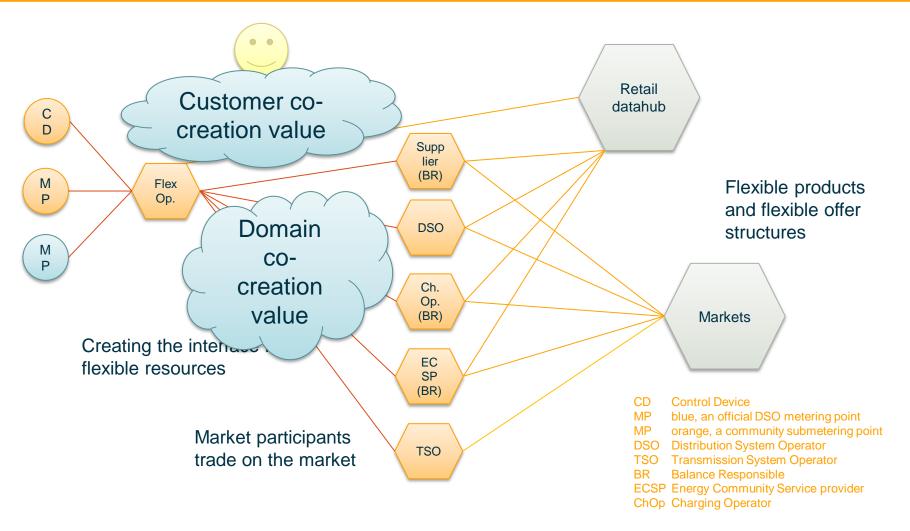
Domain cocreation value

#### Flexibility is an instrument on all Nordic market levels

Retail Markets have their Open trading of single bids (bid/ask) own pricing and product **Financial**  Financial settlement against day ahead price structuring mechanics that market work on top of all the wholesale levels shown One time bid for every trading unit (hour) Day Physical delivery ahead market Open trading of single bids (bid/ask) Reserve markets also exist Intraday market at TSO level to manage intra trading unit balance, One time bid for every trading unit (hour) they are also open to all Regulatin participants, volumes affect Day-ahead price defaults g power market settlement levels Enforced Balancing Uses regulating power prices power market



### Flexibility Operation and Trading create value in future Energy Markets





### **Empower IM Executing the New Energy Economy**

Thank you for your attention

Jan Segerstam

Development Director

jan.segerstam@empower.fi









#### Exploring Social Media as a Resource for Value Co-creation -Company and Research Perspectives

#### Mervi Huhtelin

Senior Specialist (Concept Development), University Properties of Finland Ltd & Sanna Ketonen-Oksi Researcher, Tampere University of Technology



#### **Company Presentation**

University Properties of Finland Ltd



#### University Properties of Finland Ltd (SYK)



147,7 million net revenue approx.

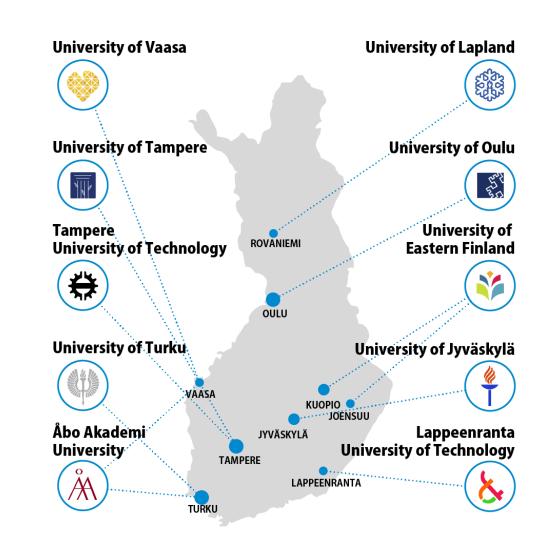
- 1.2 billion asset value
- 1.1 million m<sup>2</sup> in 310 buildings



112 000 students in the premises
19 000 people working in the SYK premises

33 employees - 1000 service providers

Owned by the State of Finland (1/3) and 10 Universities\* (2/3)

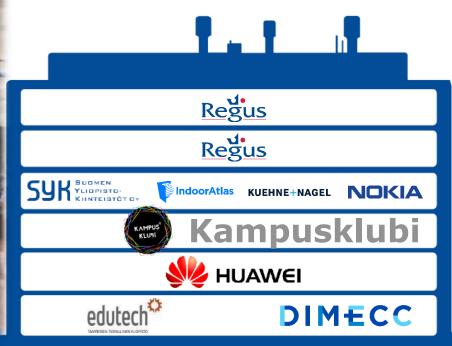




#### Attractive multiuser campuses: Kampusareena

Multiuser building at the Tampere University of Technology campus



























#### University Properties of Finland & Social Media

#### Today, we wish to

- Increase the awareness of our company
- Create a positive corporate image
- Communicate our strategy: who are we and what are our goals
- Attract great people to work in our company

#### In the future, we wish to

- Gain understanding about the changes in social and economic environments
- Be able to identify and describe the skills and knowledge available in campuses
- Attract value adding companies and partners to collaborate at our campuses
- Use social media for measuring the impact of development activities

### Data, Emotions and Experiences in Novel Ecosystem Level Value Co-Creation (DEEVA)

- Is executed by a multidisciplinary research consortium consisting of 3 Finnish universities (i.e. Tampere University of Technology, Turku University of Applied Sciences and Tampere University of Applied Sciences) and 6 international universities.
- Utilizes the opportunities of digitalization in order to
  - A) Create value from data
  - B) Develop new, customer driven service products and methods
- Collaborates with over 20 companies of different size representing various industries.

### Various streamlines for studying Social Media: 1. COGNITIVE STUDIES

- How do, for example, personality traits direct Social Media behaviour?
- What kinds of explanations are there for different Social Media behaviour (in comparison with real life)?

**Advocator**: Likes sharing information with rational arguments. Is socially active, and mostly targets tweets to individuals, not organisations.

**Jester**: With strongly emotional tweets, the jester often targets individuals with his (her) tweets. Likes challenging other people, but not necessarily in a negative way.

**Spokesperson**: Very rational, focus on information sharing with additional links. The profile of a specialist or expert.

**Provocateur**: Likes challenging others in a mostly socially and emotionally positive way. Targets his (her) tweets mostly to individuals.

**Boundary spanner**: Specialists who communicate in a rational way. Strong drive to reconcile opposite point-of-views. Active in information sharing, but the tweets rarely include weblinks.

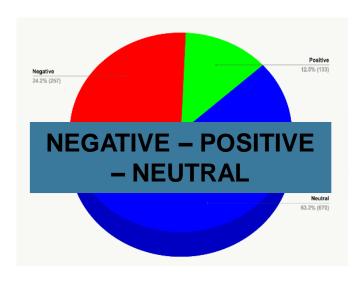


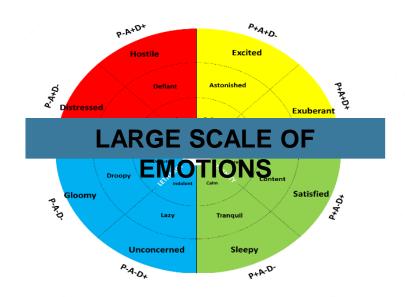
Ketonen-Oksi, S. & Jalonen, H. (2017). Advocator, Jester, Spokesperson, Provocateurr or Boundary spanner? Exploring different sommunication styles at Twitter. In proceedings of IKAD2017 conference, 6.-8.6.2017, St.Petersburg, Russia.

### Various streamlines for studying Social Media: 2. STUDYING AFFECTION

- How do emotions affect on Social Media behaviour?
- How to manage Social Media use/discussions if strongly affected by emotions?

#### → Various impacts on e.g. company-customer interactions





Helo, T, Jalonen, H. (2017) Tunnistaako kone tunteesi? In Twitter viestintänä. Pekka Isotalus, Jari Jussila & Janne Matikainen (eds.) (in press)

Jussila J., Boedeker M., Jalonen H., Helander N. (2017) Social Media Analytics Empowering Customer Experience Insight. In: Kavoura A., Sakas D., Tomaras P. (eds) Strategic Innovative Marketing. Springer Proceedings in Business and Economics. Springer, Cham

Helo, T., & Jalonen, H. (2017). Sosiaalisen median sävyanalyysi organisaation kehittämisessä. Twitter viestintänä –kirja.

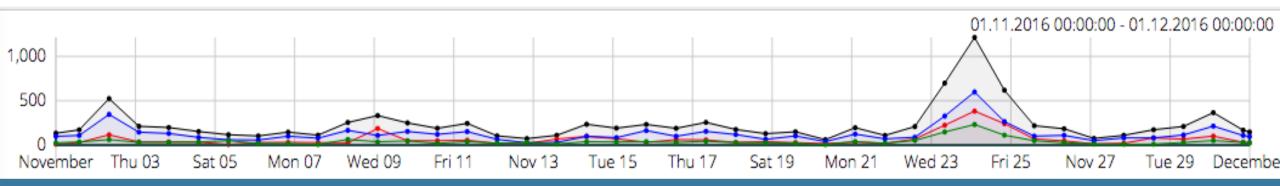
Jalonen, H. (2017). "A good bell is heard from far, a bad one still further": A socio-demography of disclosing negative emotions in social media. The Journal of Social Media in Society, 6(1), 69–108.

Boedeker M. (2016). Understanding affective experiences: Towards a practical framework in the VALIT-project. TAMKjournal. Tampere University of Applied Sciences.

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### Various streamlines for studying Social Media: 3. BEHAVIOURAL STUDIES

- How do individuals and organisations behave in Social Media?
- Why and how individuals / organisations choose a certain Social Media platform?
- How is Social Media being consumed?
- What kinds of impacts does Social Media have on individuals / organisations?



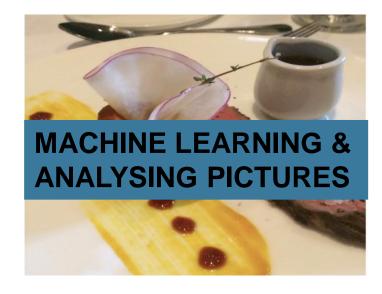
#### NEED FOR MORE DATA AND LONGITUDINAL RESEARCH TO GAIN DEEP KNOWLEDGE

Jalonen, H. & Jussila, J. (2016). The nexus between social media behavior, negative consumer emotions and brand disloyalty. 12th European Conference on Management Leadership and Governance (ECMLG), November 10–11, 2016, Bucharest, Romania.

### Various streamlines for studying Social Media: 4. PLATFORMS, APPLICATIONS, TOOLS OF ANALYSIS

- Technology based research on different platform types and functionalities
- Comparisons between different platforms and applications
- Development of new methodologies and new tools for Social Media analysis
- The use of machine learning and artificial intelligence in business analytics, e.g. IBM Watson





Huhtamäki, J. (2016). Ostinato Process Model for Visual Network Analytics: Experiments in Innovation Ecosystems. Tampere University of Technology. Publication, vol. 1425, Tampere University of Technology.

Jalonen, H. 2017. Using Social Analytics for Value Co-Creation in Digitalized Ecosystems 13th International conference on Technology, Knowledge & Society May 26–27, 2017, Toronto.

#### **SUMMARY:** Social Media - a resource for value <u>co-creation</u>?

#### Increased benefits and challenges for businesses

- Global markets (various value networks)
- Non-predictability (customers emotional demands)
- Competitivity (continuous need for new innovations)
- Both the operational and strategic levels are affected

#### High demands for multidisciplinary collaboration

- Global markets (various value networks)
- Data overload (data science, knowledge management, information science)
- Changing cultural contexts (sociology, history etc.)
- Human-machine-interaction (from psychology to information management)

Ketonen-Oksi, S. (2017). From interactions to cocreation. A systems view on digitalisation and the changing customer management practices. Books of Abstracts. Futures of a Complex World, 12-13 June, Turku, Finland.

Ketonen-Oksi, S. (2017). Working on a Shared World – A Systems View on Digitalisation at Workplaces. Work and Labour in the Digital Future. 16-18 August, Turku, Finland.

Vilko, J., Helander, N. & Seppänen, M. (2016). The future of customer value-multi-industry insights of value determinants in service networks. 18. December 2016 7th International Conference on Operations and Supply Chain Management (OSCM): 18-21 December 2016, Phuket, Thailand. (OSCM Journal).

Paavola, J., Helo, T. Jalonen, H., Sartonen, M. & Huhtinen, M. (2016). Understanding the trolling phenomenon – The automated detection of bots and cyborgs in the social media. Journal of Information Warfare, 15(4), 100–111.







### Thank you!

@Sykoy @Huhtelin #kampusareena

@TampereUniTech @KetonenOksi #deevaresearch

### JOIN US FOR THE UPCOMING EVENTS

• e-Valuecreation Webinar, 29 November, 2017. Registration:

https://koulutus.ttl.fi/Koulutuskalenteri/Koulutuskalenteri/Tutustu-tarkemmin/id/4306

- Webinar Series on the Results of the KUMOUS-project from Oct to Now. Registration: www.ttl.fi/koulutuskalenteri!
- Working group on 'Professions and Professionalism in the Digital Era' in Working Life Conference 2-3.11.2017. Registration:

https://www.lyyti.fi/e/?p=s&k=a09CD3dD752E273490C06Bf3!



We are on a break

and will return

at 02:00PM.

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## Value Co-Creation in Service Innovation

Marja Toivonen
Adjunct Professor
University of Helsinki and Aalto University

#### Contents of the presentation

- 1) Service innovation as a change in service products highlighting the role of coproduction between the provider and the user
- 2) Service innovation from the value creation perspective highlighting the role of users as value co-creators
- 3) Social and systemic innovations, and the new opportunities and challenges provided by digitalization
- 4) Two examples from the public sector



## Co-production as a core feature in services

- Services were long regarded as laggards in innovation due to the emphasis on technological novelties. A prerequisite for the discovery of innovations in services was the insight that also immaterial changes are important.
- In the early stages, the focus was on service products. Modelling these products was a way to reveal the opportunities for innovations. The models showed that innovative outcomes can emerge in many ways: as an improvement or recombination of existing elements or as an addition of new elements.
- A specific feature of a service product is the central role of the process. When
  evaluating the quality of a service, customers pay attention not only to the
  outcome but also to the process. Deviating from the material production, a
  service process cannot be realized without a customer: customer is a co-producer
  of the service. Correspondingly, customers are important sources of innovations in
  services.



## A new service as a combination of a prototype and customer unique features

the perspective of the customer and actual service provision

UNIQUE OUTCOME PERCEIVED BY THE CUSTOMER

UNIQUE PROCESS WHERE THE CUSTOMER PARTICIPATES

#### **PREREQUISITES**

### SERVICE CONCEPT

Analysis of the customer's needs and the ways in which they are met; the content and structure of the service

### SERVICE RESOURCES

Staff, physical/ technical environment, organizational structure; customers as a resource

### **SERVICE PROCESS**

Prototype of customer processes, describes the chain of activities

the perspective of the service provider and service innovation

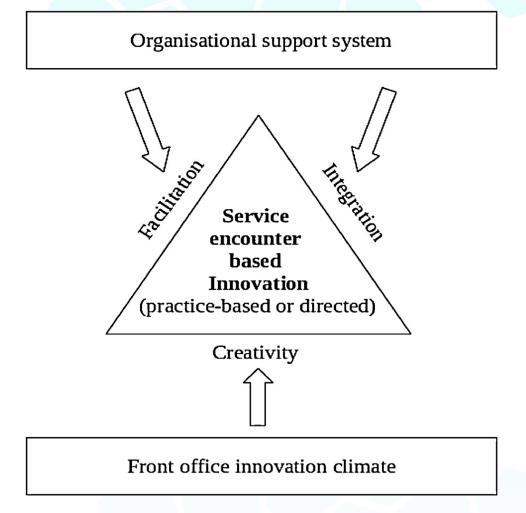




### Innovation based on customer interaction (service-encounter)

- The ideas emerging in employees' interaction with customers are an important source of service innovations.
- Thus, bottom-up, user-based and employee-driven innovations play a central role in services – innovations often emerge in practical work.
- Prerequisites for innovation are an organizational support system and a front office innovation climate, which foster and help the recognition of ideas.

Source: Sörensen et al., 2014



## The perspective of value co-creation

- The so-called service-dominant logic (S-D logic) suggests that even more important than innovations in individual services is a 'service mindset' that appreciates customers and users as co-creators of value (Vargo and Lusch, 2004; 2008, 2016).
- A central argument is that value is not inherent in goods or services but becomes realized only when goods or services are used. From the viewpoint of value creation, there is no difference between goods and services – both are outcomes of a deeper phenomenon of 'service', a benefit provided to another party.
- Goods and services are not used in isolation. In order to be meaningful, they have to be linked to other goods and services. It is the customer who makes this linkage in the use context. He/she adds value to an individual good or service acquired from one provider by combining it to other resources acquired from other sources.

## Practical implications of value co-creation

- As value is co-created with customers, it cannot be first produced and then sold.
   Correspondingly, customers are not targets but resources.
- The focus in the production of goods or services is on assisting customers to benefit from these goods or services (facilitating their value creation process).
- Customers are not isolated entities but their needs and wants are deeply rooted in the context of their networks. This brings to the fore a multi-actor analysis and the role of institutions that coordinate the activities of multiple actors.
- An institutional view is central in the S-D logic analysis of innovation. Regarding the innovation process, S-D logic highlights a resource-based view instead of the linear stages approach that has been the norm for several decades.



# Institutionalization as a core process in multi-actor innovation

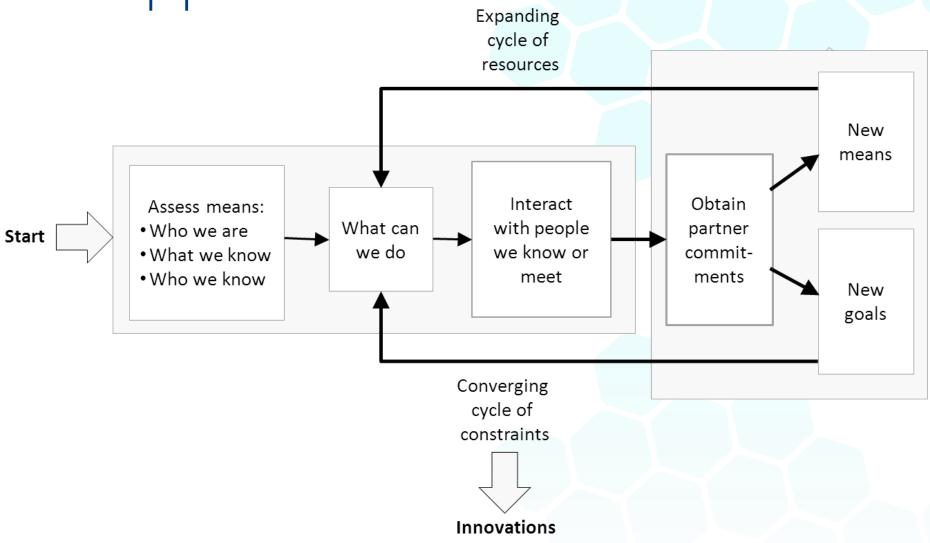
- Innovation has traditionally been analyzed as an activity of the producer. More recent studies have added to this analysis the interaction with the customer. S-D logic broadens the perspective further to multiple actors integrating, exchanging and applying resources. (Vargo and Lusch., 2016).
- Here, an important issue is the way in which this multi-actor value creation is coordinated. S-D logic argues that the coordination takes place through institutions and institutional arrangements (laws, social norms, conventions, routines etc.).
- From the viewpoint of innovation, the process of institutionalization is crucial. It refers to the change, disruption and maintenance of institutions, and is essential for both the creation and dissemination of innovations. It is important to note that institutionalization drives both the building up of new institutions and the maintenance of old ones (Wieland et al., 2016).

# An alternative to the linear view on the innovation process

- Innovation is still often analyzed as a linear process starting from an idea which is then developed, tested and piloted, and finally launched to the markets.
- This systematic process resembles planning. However, a core feature of innovation is that the end result is not known beforehand, and the process includes much insecurity and tacit knowledge.
- Experiential approaches are more natural in this kind of a context. They are based on interactive learning – the creation of shared experience of the object to be developed. This highlights the role of customers and users in innovation.
- The approach of effectuation begins from available means and continues as an iterative process. Goals become clear in the course of action, which includes quickly realized small successes and failures. Essential tasks are careful framing of the problems, and contextualizing specific decisions and linking them to other decisions.



## Effectual approach





Source: Read et al., 2010

28.8.2017

# Interlinkages between service, social and system innovations

- Current social, economic, and environmental challenges are too big to be solved via individual product/service innovations. There is a need for social innovations. Here, a crucial question is how to combine various innovations effectively and spread them rapidly based on the continuous interaction of different organizations.
- In social innovations, the novelty includes not only a new outcome but also new ways to interact with other stakeholders. Thus, the emergence of a social innovation requires the simultaneous development of organizations, technologies, services, networks and partner relationships.
- Social innovations are usually systemic in nature. The issues included cannot be identified directly. They manifest themselves in practical problems that have to be analyzed in order to understand the underlying dynamic complexities. Interaction between conceptual and practical levels is required.



## Solving systemic problems

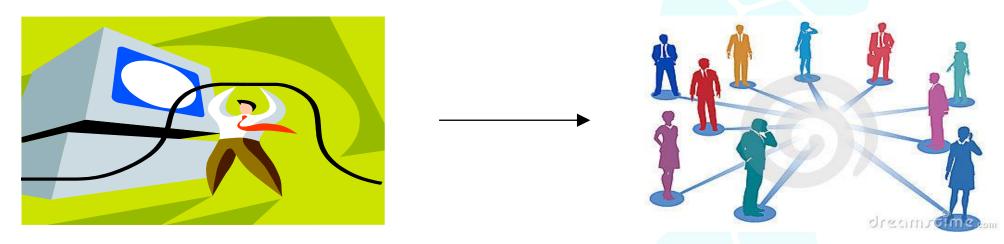
Level of Focus	Problems	Solutions
Invisible system activity	Developmental process to identify system contradictions	Designing new forms of the activity (e.g. new rules, new tools)
Visible individual actions, events	1	
	Identifying the obvious problem	Implementing the obvious (or new) solution

Source: Adapted from Seppänen (2000); Botha et al. (2002)



## Digitalization increases the opportunities of innovation

A big question in the near future: which stakeholders in various sectors will combine their resources to utilize the opportunities of digitalization in a larger scale and what will be their models of collaboration



Current stage: the providers and users of data utilize the opportunities of digitalization to improve their own activities. Focus is on the development of technology. This has led to the arguments that there is actually nothing new in digitalization: linkages between IT devices have existed since the beginning of the 1990s.

Future prospect: data from different providers and users will be broadly integrated and crosses sectorial borders. Focus is on collaborative models and new services enabled by digitalization. A deeper change is taking place towards activities that stimulate and empower users.

## Balancing the value creation in a multi-actor context

- Besides the customers, the impacts of innovation have to be analyzed from the perspective of other stakeholders: suppliers, partners, employees, and society at a broader scale.
- It is important to be aware of the possibility of contradictory results: the value created for one stakeholder may mean destroying or neglecting the value of the other.
- Finding a balance in the multi-perspective framework is an important topic for innovation.



Palomäki et al. (2014), modified from Bocken et al., 2013; Evans et al., 2013



# Case 1: Multi-professional collaboration and a digital platform in social services

- Case 1 describes the development of social services in the sub-area of child and family services in Hämeenlinna city. The aim was to improve these services via multi-professional collaboration and the empowerment of citizens to take responsibility for their own wellbeing.
- The case was part of the national project on experiment-based development in Finnish cities and municipalities 2015-2016. Thus, the case (studied via interviews) also illustrates the opportunities and challenges of experimental innovation.
- The focus of the case was to gather together the supporting services targeted to children, youth and families into an 'integrated model of wellbeing'. Earlier these services have been scattered in social and health care. Important elements were a service plan to which the user and the service providers committed themselves and a digital platform which could function as their mutual information channel.



# Case 1: Multi-professional collaboration and a digital platform in social services (cont.)

- In the case, integration crossed several organizational boundaries: it fostered collaboration between social care, daycare, primary school and health care.
- This integration reflects paradigmatic changes in the development of welfare services: the emphasis on New Public Management (NPM), which also includes elements of traditional public administration and the emerging Network Governance.
- The results reveal that attitudes towards multi-professional work and the digitalization of services were positive among service providers.
- However, the renewal turned out to be too challenging, and when the national project ended, also this local experiment was stopped. Problematic points were, among others, insufficiency of a bottom-up perspective, lack of technological readiness, and fears among the users regarding the privacy issues.



# Case 2: Child-adult co-creation in educational services

- Case 2 describes a learner-centric education pilot in preschools. The pilot was carried out in three suburbs of the city Vantaa. We studied the pilot via participatory observation and interviews.
- The pilot encouraged initiatives of preschool children and fostered the broadening of learning environments via collaboration between preschools and libraries. The contents of the pilot focused on the development of children's own game - thus, the pilot also illustrates the new opportunities provided by digitalization.
- The results confirmed the importance of flexibility in the development of novel practices. The central role of children's initiatives meant that the steps taken were continuously adjusted and modified. On the other hand, while the teachers interpreted and used intuition in the changing situations, they also maintained enough structure so that the project progressed and finally achieved the goal set.



# Case 2: Child-adult co-creation in educational services (cont.)

- Our study confirmed the relevance of the S-D logic argument about resource integration as the core of value creation. The game development would not have succeeded via children's activity or via teachers' activity only - both were needed.
- Collaboration between preschools and libraries was beneficial to all stakeholders: it extended the learning environment of the preschools, providing concrete means to realize the new educational goals. It increased awareness of the multiple services that libraries offer, highlighting the role of libraries as an 'adventurous' place for children, and more broadly, as an open space for the community.
- The game development revealed the children's readiness and willingness to combine the material and virtual worlds. The role of technology as an engagement platform (Ramaswamy, 2010) was very clear in the activity of the children, but it did not differ in this respect from the role of books or material tools.



# Work in progress: structuring ideating, voting the theme, learning the tools...





## A model for preschool-library collaboration

The participants of the pilot produced a model that summarizes the core points of a new learner-centric approach for preschool education.

The model highlights project work and includes collaboration with libraries, possibly also with other types of partners.

Hyytinen and Toivonen, 2017









## Thank you!

# QUESTIONS AND COMMENTS FOR PRESENTER







# Highlights of Human-Centered Co-Evaluation Method

Eveliina Saari
Senior Researcher
Finnish Institute of Occupational Health







# Reflections from research to practice: Highlights of human-centered co-evaluation method





Tekes

Value co-creation in the digital era 24.8.2017 Webinar

Eveliina Saari, Senior Researcher, FIOH

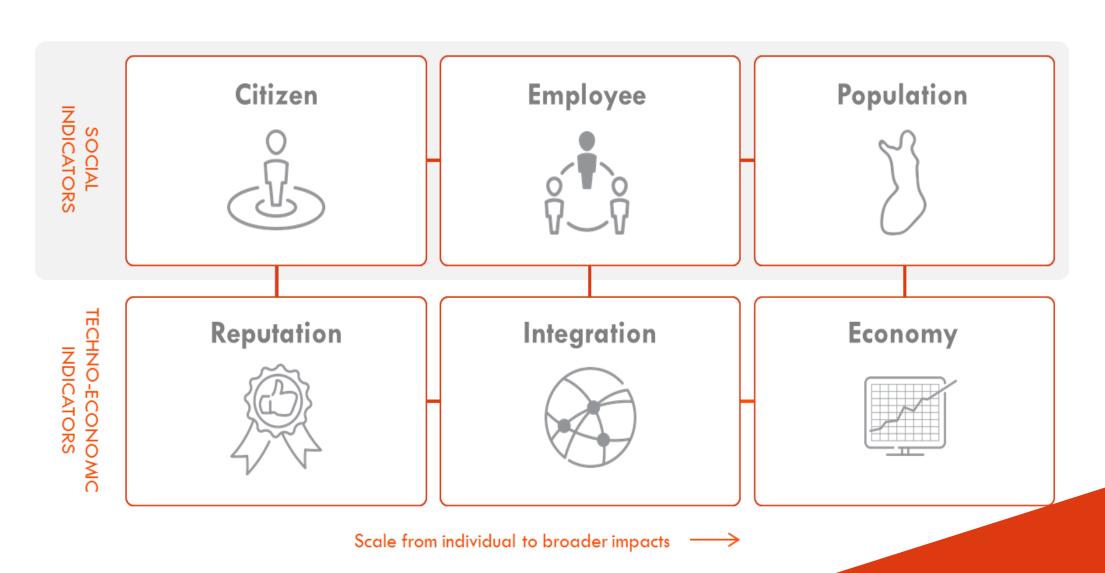
### **Background and motivation**

- Public sector services aim at creating social value by improving the wellbeing of citizens (Kroeger & Weber 2014) and reducing the target group's social need. Their ultimate aim is not to gain profit, but to create public value (Hartley, 2005, Levesqué 2013). -> need to evaluate multiple values
- Evaluation of service innovations in general terroles to from single values of technological progress and bis services. In digital services, the roles of citizens and employees may change radically. More skills and agency may be required from citizens and routine work of the service employees may diminish (e.g. Berger et al. 2016). -> need to evaluate impact on human beings
- Service innovation experiments may remain just experiments without co-evaluation between developers, service providers, users and enhancers -> need to evaluate experiments between different actors, learn and make sense together

### Our aim was...

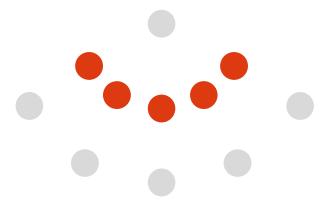
- To develop a human centered co-evaluation method, which focuses on multiple values of solutions, and creates a process for mutual learning and capability building between inclusive actors.
- The developed method consists of
  - 1) a multi-criteria framework which is used to evaluate multiple impacts of innovation (Djellal & Gallouj, 2010, 2013; Hyytinen 2017)
  - 2) a participatory evaluation process to support multi-voiced evaluation and learning (Saari & Kallio, 2011; Patton, 2011)

### Multi-criteria model for human centered co-evaluation





The evaluation aquarium based on active listening between developers and enhancers





## Evaluation of 'integrated model of wellbeing'

### **CITIZEN**

The IMW prevents citizen to fall between services, but it requires active agency of his/her own life.

The citizens with poor digital skills and poor life circumstances could not become active users.

### **EMPLOYEE**

The IMW did not become userfriendly and required citizens' permission for documenting their data into the platform.

Employees were not involved in planning the tool.

### **POPULATION**

The regulations in health care sector hinders transfer of patient data between services.

Population level impact was not visible in the experiment phase.

### **REPUTATION**

If the IMW had been successful it would have improved the reputation of the town, but it was not realized.

### **INTEGRATION**

Integration between different ICT-systems was needed, but the IMW required double reporting and the technical interface was unwieldy.

### **ECONOMY**

In principle the IMW would save citizens' and employees' time, but it could not yet be tested.

Because of the public context, the IMW technical solution had to be done quickly and lowpriced with in-house ICTproviders.

### **Concluding remarks**

- Multi-criteria framework in the model makes visible that the human and social values are equally important with technological and financial aspects of innovation.
- Participatory process functions as a learning arena to achieve collective insights to support the development and scale-up of innovations.
- Collaborative evaluation process may provide new insights and speed up the development.
- Evaluation capacity building should be know-how of each organization who develops services by experimenting.
- However, learning —oriented evaluation processes does not happen spontaneously, instead it requires a facilitator who can use his or her time and effort into designing and conducting collaborative evaluation processes. New kind of service evaluator needed?













## Human-centered co-evaluation method for digital service innovations

27th Annual RESER Conference

September 7-9, 2017, Bilbao, Spain

Kirsi Hyytinen, Eveliina Saari, Johanna Leväsluoto, Mervi Hasu, Sari Käpykangas, Helinä Melkas, Satu Pekkarinen, Mirva Hyypiä, Pirjo Korvela, Anne Nordlund & Marja Toivonen

## Digiä ikä kaikki! KUMOUS-hankkeen webinaari-sarja

11.10. klo 13-14
Uusi oppiminen:
Lapset keksijöinä
25.10. klo 9-10
Nuorten arjen
hallinta digiajassa

1.11. klo 9-10 Digiajan uusi ammattilaisuus 8.11. klo 9-10 Ikäihmisten mielekäs digiarki



## CLOSING WORDS

- How is digitalization transforming business environment?
- How can digitalization enhance the value (co-) creation?
- Why should businesses engage their customers to develop new products and services?
- What is the *value* of value co-creation?
- What are the limits of co-creation?
   Is co-creation the key for all kinds of challenges?



# JOIN US FOR THE UPCOMING EVENTS

• e-Valuecreation Webinar, 29 November, 2017. Registration:

https://koulutus.ttl.fi/Koulutuskalenteri/Koulutuskalenteri/Tutustu-tarkemmin/id/4306

- Webinar Series on the Results of the KUMOUS-project from Oct to Now. Registration: www.ttl.fi/koulutuskalenteri!
- Working group on 'Professions and Professionalism in the Digital Era' in Working Life Conference 2-3.11.2017. Registration:

https://www.lyyti.fi/e/?p=s&k=a09CD3dD752E273490C06Bf3!







# Thank you!





















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