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# Bridging the Co-creation Gap between Co-creators, Companies and Living Lab





University of Cambridge

Dr Veronica Martinez

University of Cambridge

**Prof Andy Neely** 

University of Cambridge











# **Key Industry Challenges**



Increasing pressure to reduce time-to-market and cost of introducing new products/services (e.g. Simchi-Levi et al., 2012).



Shift from passive consumer to active innovator (Prahalad and Ramaswamy, 2004).



In today's customer-empowered world, co-creation capabilities are critical to the future growth of a company (Bhalla, 2010).



Living labs offer a new platform for companies to engage with customers in a process of co-creation (Lusch et al., 2007) to understand both existing and emerging user needs (Westerlund and Leminen, 2011).











### What is co-creation?

The term co-creation refers to any act of collective creativity where more than one individual is involved, resulting in something that is not known in advance.

# What is a living lab?

Living Labs are defined as physical regions or virtual realities where stakeholders form public-private-people partnerships (4Ps) of firms, public agencies, universities, institutes, and users all collaborating for creation, prototyping, validating, and testing of new technologies, services, products and systems in real-life contexts.

Source: Sanders and Simons, 2009

Source: Westerlund and Leminen, 2011

# How co-creation can benefit you (1/2)

- Real Time Feedback: Co-creative enterprises do not wait till a new product is
  designed and launched to obtain customer feedback. Instead, beta versions and
  prototypes are released to customers and other stakeholders for suggestions which
  are then evaluated and incorporated into the product.
- **Customer Needs:** Customer involvement helps to easily experiment with new product offerings and also to make the final product as close to the customers' needs as possible.
- Expect the Unexpected: Creative and value adding ideas may come from stakeholders not only about products, but also about other areas in the value chain such as product packaging, sales channels and even raw materials used.









### How co-creation can benefit you (2/2)

- **Generate Brand Loyalty:** As customers start 'owning' the product from the ideation stage itself, the enterprise is able to build strong bonds and deep relationships with the user community. It also helps immensely towards developing a loyal user group for the brand.
- Cost Reductions: Cost cutting is a huge focus area for most companies. Cocreation as a philosophy of doing business makes good financial sense as well by
  helping to reduce the cost of marketing and the cost of product creation. Co-creation
  ensures that the company does not lose out its creative and innovative edge.
- Risk Mitigation: Co-creation also allows firms to mitigate risks associated with
  product development to a large extent. As all stakeholders contribute ideas to
  creating the product, the chances of a product becoming a total flop is mitigated to a
  large extent. However, while sharing the risk of product development, enterprises
  must remember that, ultimately, the product ownership resides with the company
  and therefore, care must be taken to evaluate each idea and decide which ones
  would go into the product.











# Case Study: JOSEPHS



- Living lab
- Established in 2014
- Town centre Nuremberg
- 5 co-creation spaces
- One theme
- Rotate every 3 months
- Open to the public
- Project of Fraunhofer Center for Applied Research for Supply Chain Services & the Chair of Information Systems I at the University Erlangen-Nuremberg









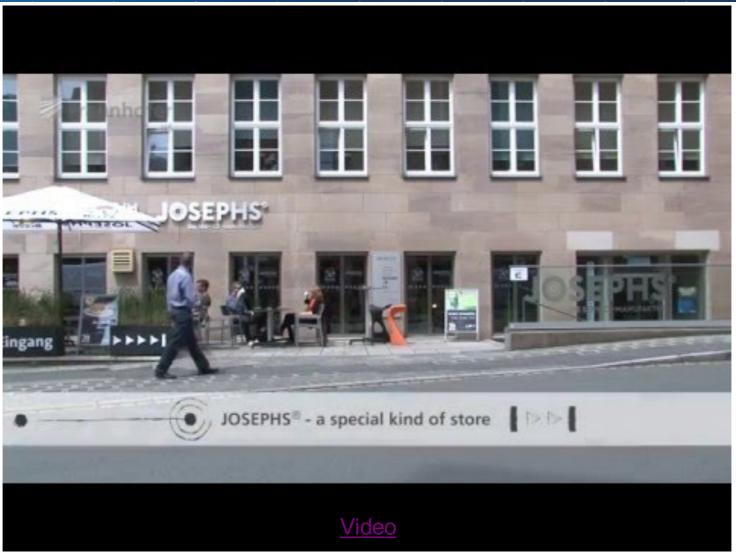








### **JOSEPHS**













### **JOSEPHS' Co-creation Process**

 Definition of the research question



- Establishment of research design
- Consideration of methods: acceptance, price, usability etc.

**BRIEFING** and RESEARCH DESIGN



- Qualitative and quantitative analysis and results
- Presentation and/or workshop in-house

RESULTS and RECOMMENDATIONS for ACTION

2

THREE MONTHS

TEST PHASE

at JOSEPHS

- Creation of the business island
- Start of the theme world
- Interim results, where required adjustments
- Feedback from about 1000 co-creators



3.000 Visitors













# **JOSEPHS: A brief summary of 2.5 years**





11 Theme worlds (May 2014-January 2017)

**62 Research partners** 

+700 Events

29,758 co-creators & visitors











### Research Gap & Objective

#### Research Gap

- In spite of a growing body of literature (e.g. Følstad, 2008; Almirall et al., 2012; Leminen et al., 2012), living lab practices are still under researched, and a theoretical as well as methodological gap continues to exist (Schuurman, 2015).
- Understanding multiple stakeholders in the co-creation process in living labs is complex due to their diverse interests. Rosado et al. (2015, p. 81) stress "the need for more specific descriptions of the practice of running a living lab, i.e [...] how to involve different stakeholders,[...], combined with a more conceptual concern with the possibility of reconciling the interest of these different stakeholders".

#### **Research Objective**

 This study explores and analyses elements that are critical to the facilitation of cocreation in living labs by integrating findings derived from existing literature with primary data collected with managers and researchers of a living lab called JOSEPHS as well as companies and co-creators.











### Research Approach



#### **THEORY**



#### Literature

Systematic literature review of academic papers & articles in press



#### **Living Lab**

- 2 Workshops (8h in total)
- 7h of Interviews
- 6 Observations

#### **PRACTICE**



### **Companies**

- 4.5h Workshop
- Questionnaire
- Documents



#### **Co-creators**

- 2.5h Workshop
- 6 Observations
- **Documents**













### **Systematic Literature Review**

#### **Rationale**

- Performed to first map and assess the relevant intellectual territory (Tranfield et al., 2003).
- It is the most efficient as well as high-quality method for identifying and assessing extensive literatures (Mulrow, 1994).

#### **Inclusion Criteria**

| Criteria      | Inclusion                     |  |
|---------------|-------------------------------|--|
| Subject Area  | Social Sciences & Humanities: |  |
| Document Type | Article, Article in Press     |  |
| Language      | English                       |  |

Selection of databases, keywords & search criteria

Evaluation of search results: *Scopus* 

Refinement of database selection & search criteria

Title and abstract review process

Full review & Snowball sampling













### **Research Approach**

Exploratory research, Grounded theory, Qualitative study

#### **THEORY**



#### Literature

Systematic literature review of academic papers & articles in press



#### **Living Lab**

- 2 Workshops (8h in total)
- 7h of Interviews
- 6 Observations

#### **PRACTICE**



### **Companies**

- 4.5h Workshop
- Questionnaire
- Documents



#### **Co-creators**

- 2.5h Workshop
- 6 Observations
- **Documents**

Data coding, Data triangulation, Thematic analysis



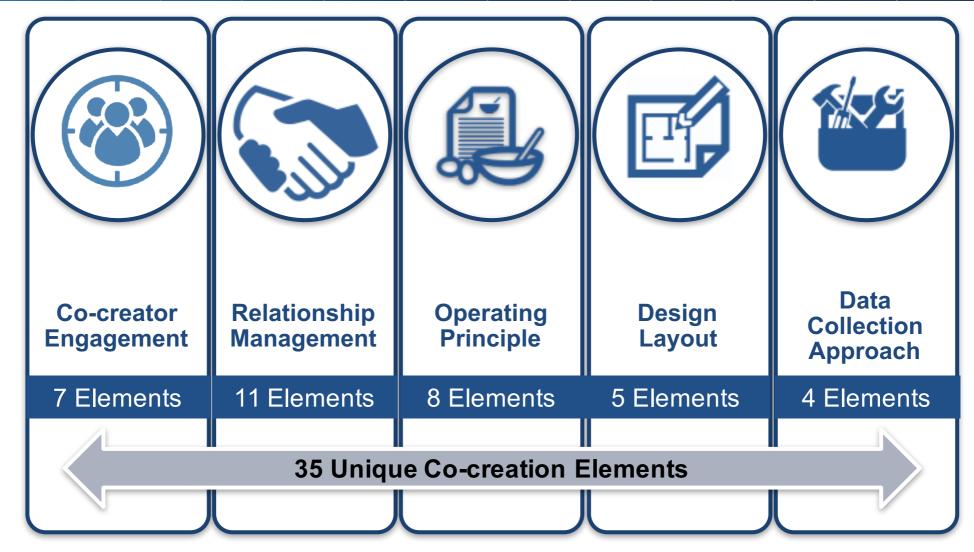








### Five Critical Factors Facilitating Co-creation in LLs













### **Co-creator Engagement**



Co-creator **Engagement** 

7 Elements

#### **Co-creation Element**

Firm and co-creator willingness and motivation to co-create

Co-creator knowledge, skills and resources

Co-creator attitudes towards the type and brand of service/product

Co-creator's clarity about person goals for co-creation

Benefits the co-creator from co-creation

Social context

Mutual learning

### Literature Perspective

"We position the customer in a social context [...]. Different between occasions in a different social context. (Edvardsson et al., 2010, p. 4)











### **Operating Principle**

#### Companies' Perspective

"It has to be informal and casual. This is extremely difficult to achieve and not everyone can create this atmosphere. I think the idea of JOSEPHS to achieve exactly this is executed really well."

### **Living Lab Perspective**

"It is basically the possibility to give feedback within the team [...] there is this atmosphere talked about with your colleagues and then improved."



**Operating Principle** 

8 Elements

#### **Co-creation Element**

Informal and casual atmosphere

Organisation of the LL in changing themes

Central location of the LL

Presentation of drafts and early prototypes

Provision of professional consulting services through the LL

Continuous feedback and iteration of prototypes

Relevant infrastructures for B2C and B2B projects

Clear explanation of the LL concept











# **Operating Principle**

#### **Co-creators' Perspective**

First and foremost, for cocreators it is key "to understand the concept of JOSEPHS in order to enter the living lab in the first place, participate and leave feedback".



perating inciple

8 Elen nts

#### **Co-creation Element**

Informal and casual atmosphere

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### **Data Collection Approach**

#### **Literature Perspective**

"First, methods applicable for living methods must go beyond those already established and implemented in social research. In the case of social living labs, methods must be devoted to to fulfil the attribute of "living methods" and creating a reallife environment that is capable of stimulation co-creation." (Franz, 2015, p. 63)

#### **Co-creation Element**

Capture the first impressions and authentic feedback

Complementary workshops to reach specific audience

Communication of an explicit research question

Interactive, engaging and tailored data collection tools

#### **Co-creators' Perspective**

In a living lab, there should be "a new way of getting feedback.



Data Collection **Approach** 

4 Elements





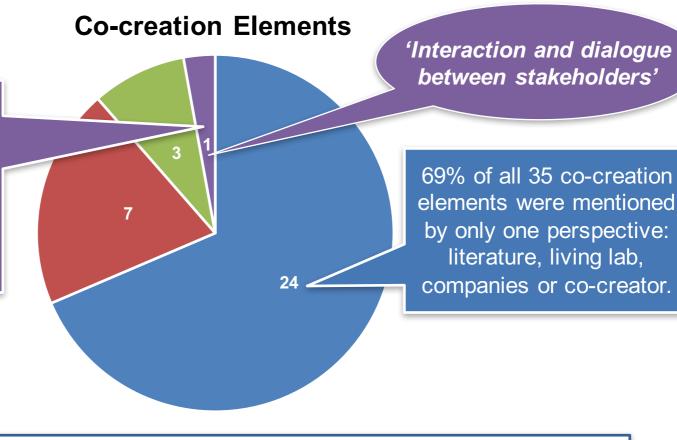






### 35 Co-creation Elements but Agreement Over Only 1

Only 1 co-creation element was identified as a critical co-creation facilitator by all four perspectives: literature, living lab, companies and co-creator.



#### Co-creation element considered as critical by:

- One Perspective
- Two Perspectives
- Three Perspectives
- Four perspectives

between stakeholders'

69% of all 35 co-creation

by only one perspective:

literature, living lab,

companies or co-creator.











### Distribution of Co-creation Elements by Perspective

| Factor Perspective | Co-creator<br>Engagement | Relationship<br>Management | Operating<br>Principle | Design<br>Layout | Data<br>Collection<br>Approach |
|--------------------|--------------------------|----------------------------|------------------------|------------------|--------------------------------|
| Literature         |                          |                            |                        |                  |                                |
| Living Lab         |                          |                            |                        |                  |                                |
| Company            |                          |                            |                        |                  |                                |
| Co-creator         |                          |                            |                        |                  |                                |













# Distribution of Co-creation Elements by Perspective

| Factor Perspective | Co-creator<br>Engagement | Relationship<br>Management | Operating<br>Principle | Design<br>Layout | Data<br>Collection<br>Approach |
|--------------------|--------------------------|----------------------------|------------------------|------------------|--------------------------------|
| Literature         |                          |                            |                        |                  |                                |
| Living Lab         |                          |                            |                        |                  |                                |
| Company            |                          |                            |                        |                  |                                |
| Co-creator         |                          |                            |                        |                  |                                |









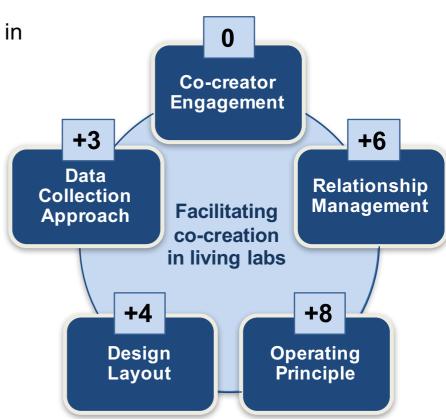




### Contributions

#### **Contributions**

- The framework identifies 35 elements grouped in five critical co-creation categories.
- This study offers a deeper and holistic understanding of the factors that are relevant to consider when engaging in co-creation in LL.
- Only one co-creation element 'Interaction and dialogue between stakeholders' (Relationship Management) is identified by all perspectives.
- Each perspective privileges some factors and neglects others. Stakeholders lack a complete and integrated understanding of all factors contributing to successful co-creation in LL.
- Thus, a large gap between theory and practice as well as different stakeholder perspectives appears to exist.













### **Next Steps**



### Work in progress

- Clarifying and rephrasing cocreation elements to improve readability and understanding based on initial feedback.
- Validation of five co-creation categories (12-14 academics – outside the research team).
- Advancing the current framework by integrating 14 individual interviews with companies (in total about 12hours).





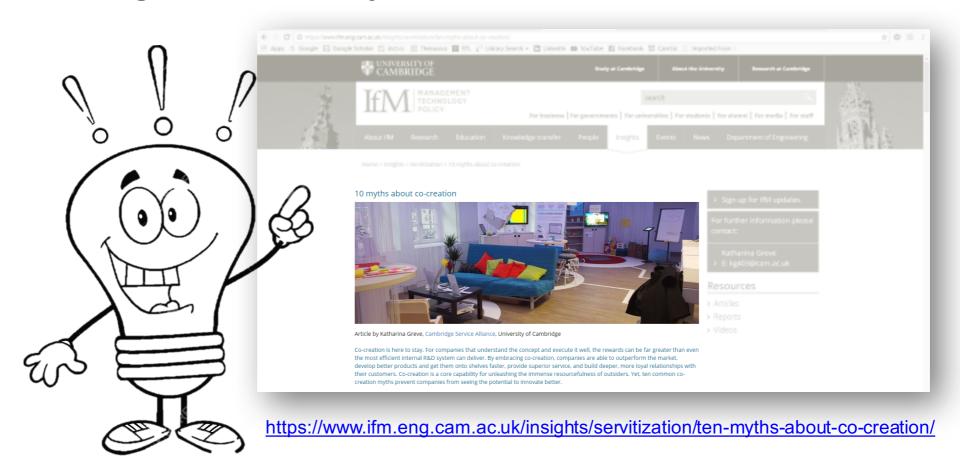






### **Additional Resources**

### IfM Insight Article: "10 myths about co-creation"













# Thank you very much for your attention!

#### **Questions or Comments?**

#### Katharina Greve

Cambridge Service Alliance University of Cambridge Email: kg403@cam.ac.uk



#### **Additional Resources!**

Available online Conference Paper **Podcast** Webinar Blog



www.cambridgeservicealliance.org/











# **Forthcoming Webinars**

| Date<br>14:30hr BST | Topic  | Invited speaker                        |
|---------------------|--|--|
| 2017                |  |  |
| June 12th           | Exploring the Service Journey  | Veronica Martinez                      |
| July 10th           | Business Ecosystems: Towards a Classification Model  | Florian Urmetzer                       |
| Sept 11th           | Bridging the Co-creation Gap between Co-creators, Companies and Living Lab   | Katherina Greve                        |
| Oct 2nd             | Barriers and Facilitators to Incident Reporting in Servitized Manufacturers  | Chara Makri                            |
| Nov 13th            | A Systems Perspective on Business Model Evolution: The Case of an Agricultural Information Service Provider in India | Chander Velu                           |
| Dec 12th            | Using outcome-oriented contracts to foster performance improvements in logistics outsourcing relationships           | Torsten Steinbach and Florian Urmetzer |

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Baron, S. and Harris, K. (2008), "Consumers as resource integrators". *Journal of Marketing Management*, Vol. 24, No. 1-2, pp. 113-130.

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Simchi-Levi, D., Peruvankal, J.P., Mulani, N., Read, B. and Ferreira, J., 2012. Is it time to rethink your manufacturing strategy?. MIT Sloan Management Review, 53(2), p.20.











# **Literature Perspective: Co-creation Elements**

| Co-creation Element                                | References                        |
|--|-----------------------------------|
| Attitudinal factors                                | Van Doorn et al., 2010            |
| Consumer's/firm's willingness to co-create         | Lazarus, Krishna & Dhaka, 2014    |
| Social context                                     | Edvardsson et al., 2011           |
| Perceived relevance of the service                 | Aggarwal & Basu, 2014             |
| Personal goal clarity                              | Aggarwal & Basu, 2014             |
| Customer capabilities, skills and motivation       | Payne et al., 2008                |
| Mobilizing behaviour                               | Jaakkola & Alexander, 2014        |
| Type of service/product                            | Lazarus, Krishna & Dhaka, 2014    |
| Participation                                      | Aarikka-Stenroos & Jaakkola, 2012 |
| Dialogue   | Auh et al., 2007                  |
| Strong relationships                               | Jaworski & Kohli, 2006            |
| Integration/involvement                            | Baron & Harris, 2008              |
| Interaction  | Payne et al., 2008                |
| Expected benefits                                  | Füller, 2010                      |
| Quality of employee interactions                   | Aggarwal & Basu, 2014             |
| Firm's willingness to integrate customer resources | Jaakkola & Alexander, 2014        |
| Access to operant resources                        | Payne et al., 2008                |
| Service facilities                                 | Aggarwal & Basu, 2014             |











### **Additional Exclusion Criteria**

| Co-creation outside  Management literature | Explanation   |
|--|---|
| Education                                  | Co-creation in the education field refers to the cooperative and constructive relationship between teachers and students (e.g. Journal of Management Education, Journal of Transformative Education, Journal of Research on Technology in Education). |
| Psychology                                 | In psychology, the patient-professional relationship is often considered in respect of co-creation (e.g. Journal of Counseling & Development).  |
| Family Studies                             | The same holds for Family Studies, addressing the role of children in the family, as well as gender roles.  |
| Interorganizational<br>Cooperation         | In the area of interorganizational cooperation, for example joint ventures, co-creation includes different businesses and institutions (Long Range Planning).   |
| Planning and Development Studies           | Moreover, Planning and development studies regularly use the term co-creation to address new venture designs, involving multiple agencies, and constituencies in the project (e.g. European Planning Studies).  |









