

---

Marc Schmidt-Keilich  
**Ulf Schrader**

# **Sustainable Embedded Lead-Users: Involving employees as customers in sustainability innovation processes**

Second International Conference of the Sustainable  
Consumption Research and Action Initiative (SCORAI)  
“Transitions Beyond a Consumer Society”

University of Maine, June 15–17, 2016



# Agenda

---

- Open sustainability innovations
- The embedded lead user (ELU) concept
- Applying the ELU concept on sustainability innovations: SELU concept
  - SELU characteristics
  - Opportunities and limitations of the SELU concept
- Conclusion and outlook

# Open sustainability innovations

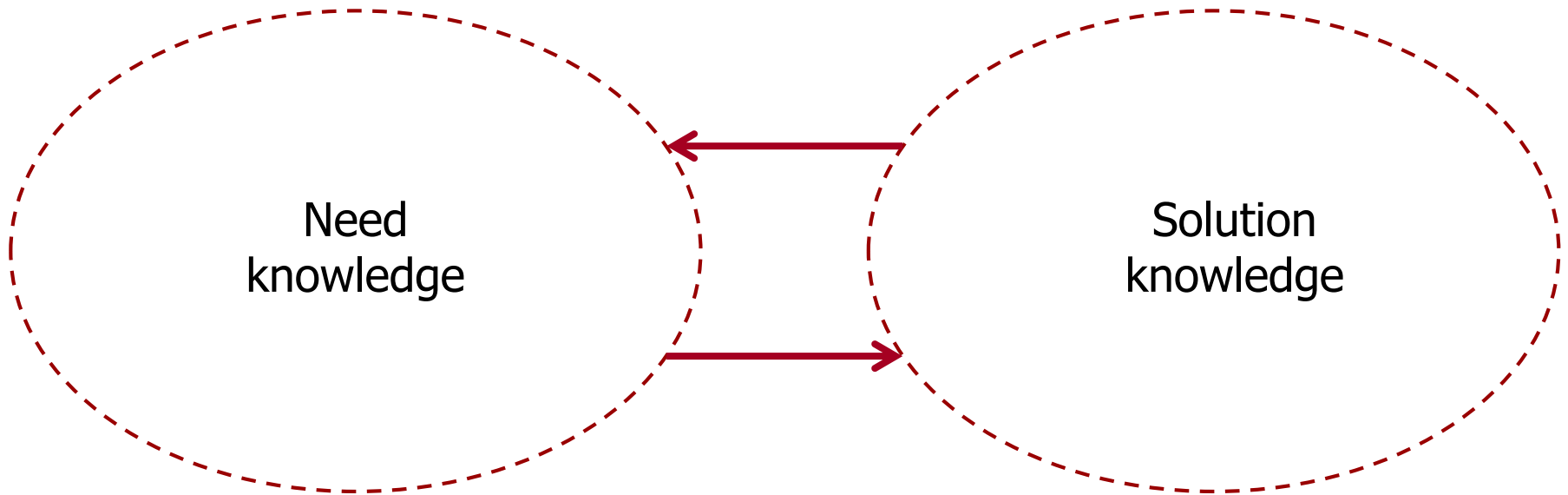
---

- Sustainability innovations: new solutions with positive impact for sustainable development (e.g. Fichter 2005, Hansen and Grosse-Dunker, 2012)
- Typical problems of sustainability innovations: low market penetration and/or rebound effects of (mis-)use by consumers
- Possible solution: integration of users in sustainability innovation processes (Hoffmann 2007; Schrader & Belz 2012)
- Challenge for open sustainability innovations: integration of lead users is most promising – and most expensive with regards to identification and integration (Schrader & Belz 2012)
  - Lead users (von Hippel 1986): (1) face needs long before the mainstream and (2) would benefit significantly by their satisfaction (and therefore often innovate themselves)

# The embedded lead user (ELU) concept

---

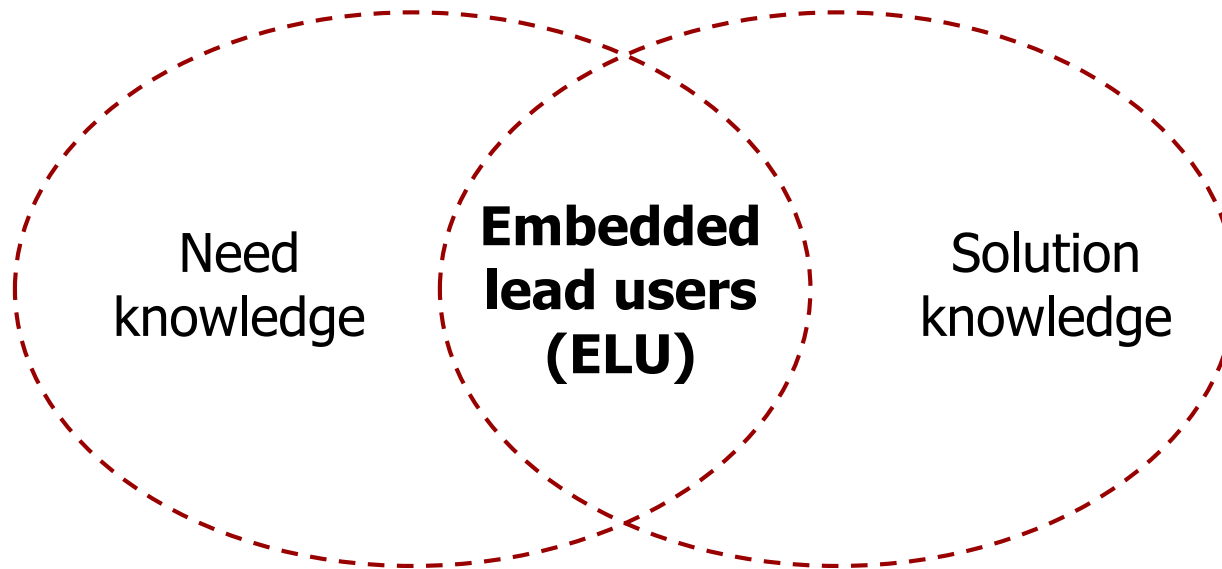
**Innovations require:**



von Hippel 1994

# The embedded lead user (ELU) concept

---



Schweisfurth 2012

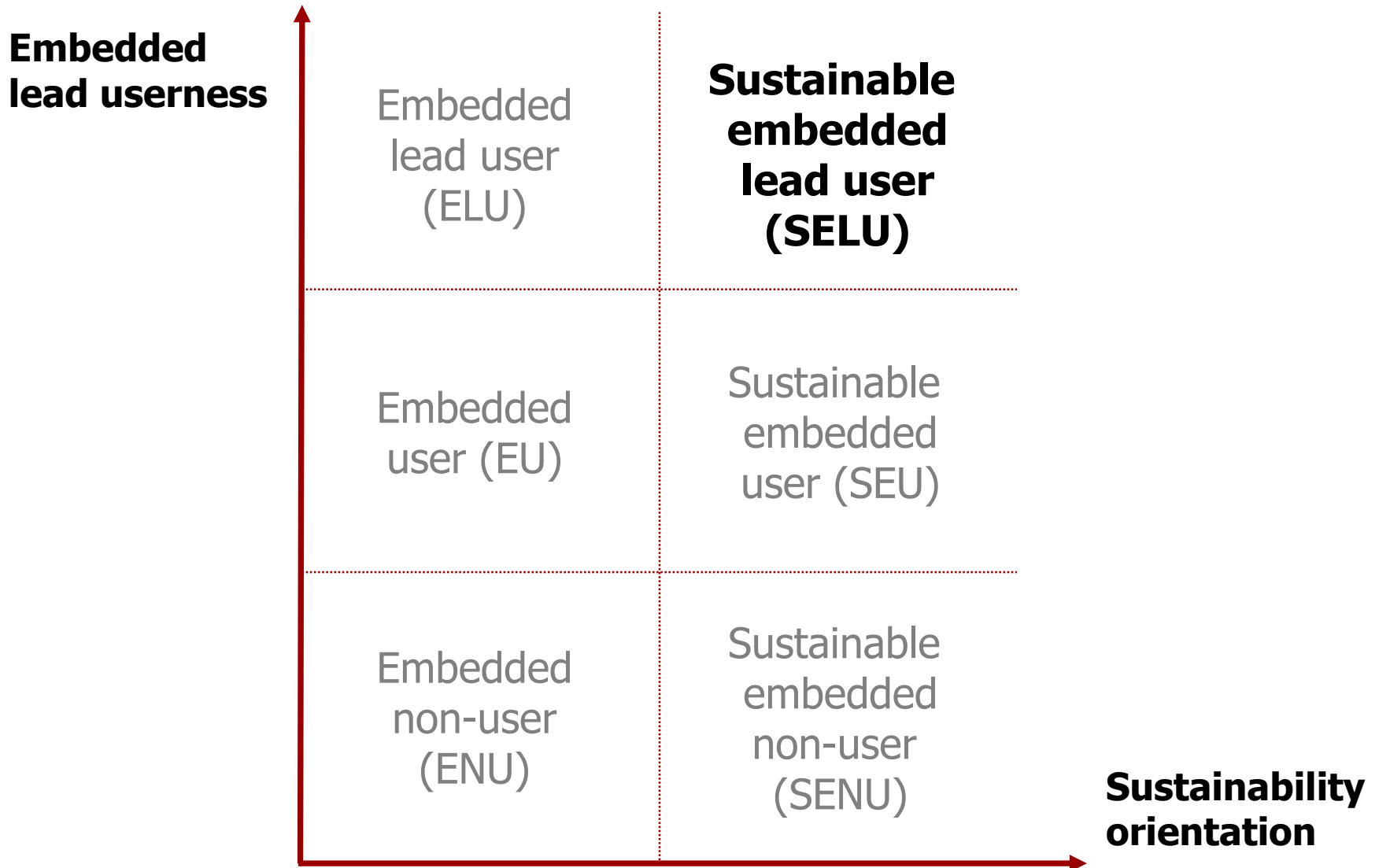
# The embedded lead user (ELU) concept

---

According to Schweisfurth (2012), the ELU concept is especially promising if

- technological complexity is low
- industry maturity is low
- product involvement is high

# SELU characteristics



**Sustainability orientation**

# Opportunities and limitations of the SELU concept

## Opportunities

- “Cheap” and prepared LU
- Feasible, sustainable innovations
- Improved CSR performance
- Participatory corporate culture
- Employee satisfaction, commitment and retention

## Limitations

- Limited number of SELUs
- Limited innovativeness of insiders
- Not-invented-„in our R&D“ syndrome
- Reactance against exploitation of private life
- Dissatisfaction due to unaccomplishable expectations



# Conclusion and outlook

- Relevant concept for sustainable consumption and production
  - Empirical validation is necessary
  - Relevance of integrating non-SELU-employees needs also to be analyzed
- ➔ IMKoN-Project (“Integration of employees as consumers in sustainability innovation processes”) (4/15 – 3/18; see [www.imkon.de](http://www.imkon.de))



DARK HORSE | INNOVATION



# Contact

---



## Ulf Schrader

Technische Universität Berlin  
Division for Economic Education  
and Sustainable Consumption

Marchstr. 23  
10587 Berlin  
Germany

[schrader@tu-berlin.de](mailto:schrader@tu-berlin.de)

Gefördert durch:



Bundesministerium  
für Bildung  
und Forschung

