### Entrepreneurial discoveries in Norway, what's new?

Innovation research in Norway – recent findings and future perspectives Session 2: Actors in innovation

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Åge Mariussen, Nordlandsforskning Håkon Finne, SINTEF

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### The actor-system tensions in regional innovation policy

- We need to understand the role of leadership in regional development games (Sotarauta, 2009)
- There is a need for policies that combine actor-based and system-based tools in new path development (Isaksen & Jakobsen, 2017)
- Individuals who bridge industry and universities or span global space play a significant role in innovation (Lam, 2014)
- Innovation processes always depend on complex human interaction (Aasen, in process)
- Still, institutional resilience and macro-economic forces cannot be easily dismissed

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### Shortcomings of cluster and innovation system policies

- Porter's "sustainable competitiveness" strategies are unable to combine exploration and exploitation in a sufficiently dynamic way (for achieving transient competiveness), and accordingly not able to adjust to rapidly changing global markets (McGrath, 2013) => cluster initiatives are no panacea
- The RIS approach is too oriented towards path maintenance and renewal, and not able to provide relevant policy advice (for new path creation) (Doloreux & Gomez, 2017)
- RIS literature "is nearly silent on the conditions that enable growth to accrue in regions where innovation occurs" (Doloreux & Gomez, 2017); assumes Schumpeter's tenet that innovation drives economic development, that MAR agglomeration advantages prevail in industrial districts, and that Jacobs externalities require cities

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### Smart specialization and entrepreneurial discovery processes

#### • Smart specialization

Level of an economy (local, regional, national): Industrial specialization that displays a comparative advantage

#### Smart specialization strategy (S3)

Co-development of industries and their bases in R&D and other resources

#### Entrepreneurial discovery process (EDP)

Micro level: Entrepreneurs' search for, and development of, new potential business areas (Kirzner, 1997; March, 1991 on exploration vs exploitation)

Level of an economy (local, regional, national): EDPs that develop or renew smart specializations; 'self-discovery' (Hausmann & Rodrik, 2003), where individual entrepreneurs can be critical resources

#### • Strategies for EDP

Giving organization and impetus to collective EDPs at the level of an economy, jointly governed between triple/quadruple helix actors

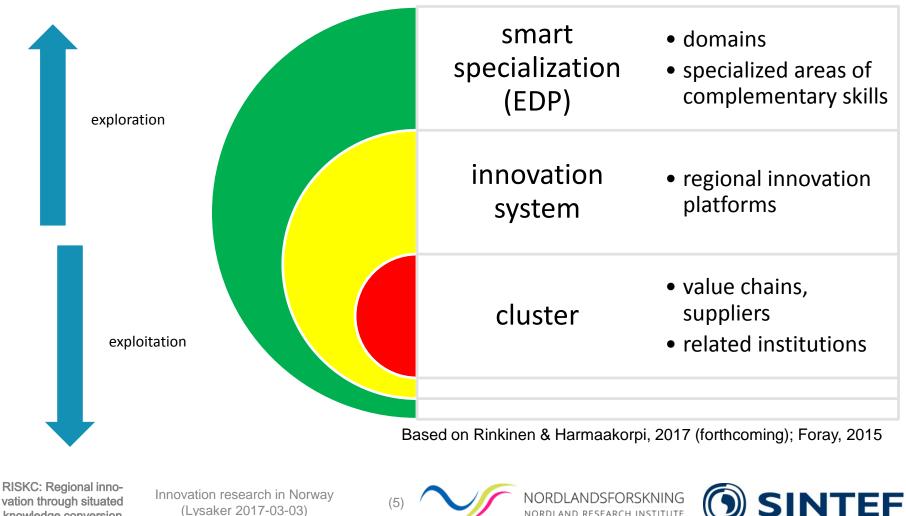
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### S3 subsumes systems approaches and (re)introduces actor-reliant policy tools



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# S3/EDP is good news for Norway

- Smart specialization is place based; related variety paradigm (Frenken et al. 2007) subsumes both Jacobs and MAR externalities and gives understanding of knowledge in economic development a proper foundation
- Policy for EDP is based on economic research on spontaneously emergent processes, also in resource based economies like that of Norway
- S3 provides a new rationale for innovation policy interventions which can help rebalance the Norwegian system of innovation in the direction of more exploration

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# Some examples of pre-S3 EDPs in Norway

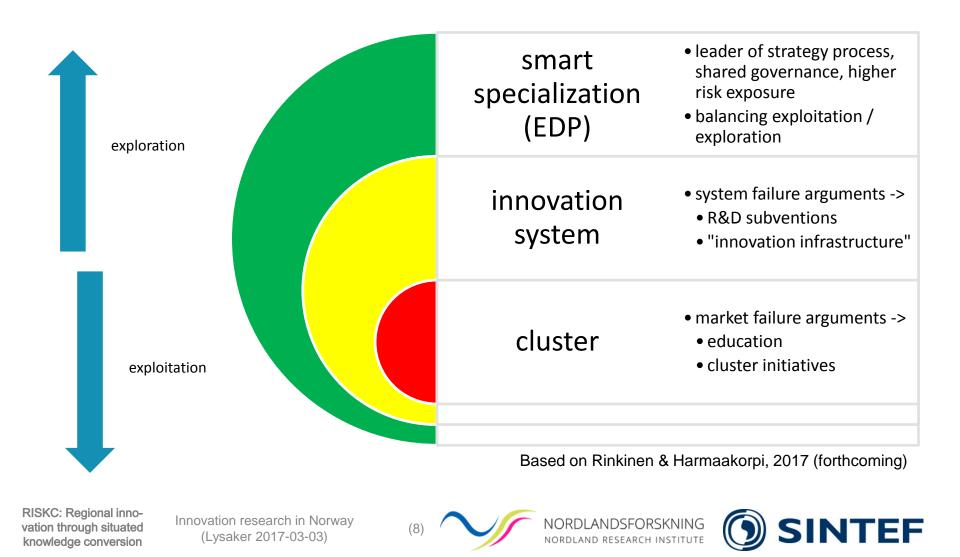
- Salmon farming (Aasen & Ullern, in process)
- Experience economy and destination development in tourism (Løvland & Mariussen, in process)
- Failures
- Unused opportunities

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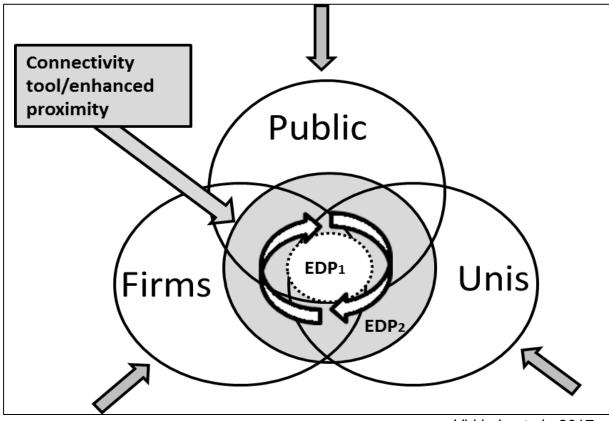




# S3/EDP requires new roles for public sector



# **Challenges (1): tools for enhancing connectivity**



Virkkala et al., 2017

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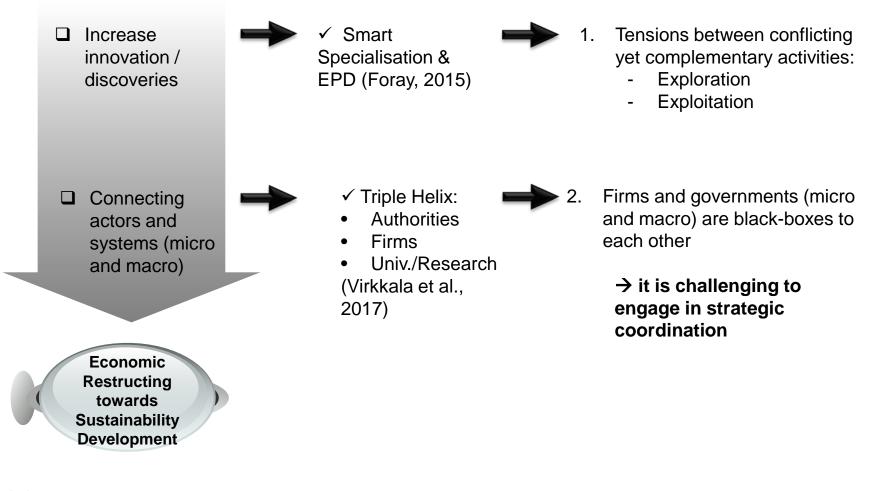
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### **Challenges (2): Tools for reorienting towards exploration**



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## New research paths

• Where is the policy balancing point between path extension, path renewal, new path creation?

Signs of lock-in and promising new paths

### Where can entrepreneurial discoveries take place?

Identifying promising domains (and tools for mapping related variety, product space and complexity, value chain climbing)

Peripheral regions in transnational knowledge networks

#### How can discovery processes be organized?

Ambidexterity in firms and at policy level; metamorphosis of industry Co-design and governance of mutual support mechanisms by policy-makers and entrepreneurs (Nguyen, 2017)

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agemariussen@yahoo.com





# Thank you for your attention

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