

Can we strategically manage multistakeholder innovation processes in agriculture?

Insights from case studies in Burkina Faso

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How to support agricultural innovation in developing countries?

Dominant thinking:

- Innovation is the result of complex and multidimensional **interactions,** which requires the engagement of a **wide range of stakeholders** (Klerks *et al.* 2012);

→ Strengthen **innovation networks** through **learning-based** approaches

Two learning perspectives	
Unsupervised	**Supervised**
Facilitation of learning processes at each level (of the value chain): invest in information sharing, knowledge production, skills development (CD interventions, innovation platforms) **and cross fingers!**	**Procedures, tools, methods or incentives are designed in a given context** in order to **monitor and pilot** innovation process, according to pre-identified objectives, needs and capacities.
Dominant in agricultural innovation support (Innovation Platform) → **not always efficient** some innovation may benefit from **more structured support, through strategic management** (Kilelu et al, 2013)	Mainly observed in inter-firms innovation network =Open innovation → Not applied in agricultural sector

Management issues in collective innovation

Diversity and complexity of collective innovation situations (Toillier et al, 2016)

- multi-centered activities; any clear objective can be assigned to collective activity
- overlapping roles
- diverging interests among involved organizations
- Multi-skilled "development agencies", with "hidden" activities
- No formal engagements

Strategic Management responses in inter-firms innovation situation (Chesbrough 2006; Loilier, et al. 2016)

create arrangements or implement mechanisms so that to:

- decrease individual risks and uncertainties (Grandori et Soda, 1995).
- keep down opportunist behaviors;
- create spaces for exploration and creativity;
- reduce the duration of initial stages, that is, to minimize the critical path of innovation across the network (Cohendet et al. 2008)

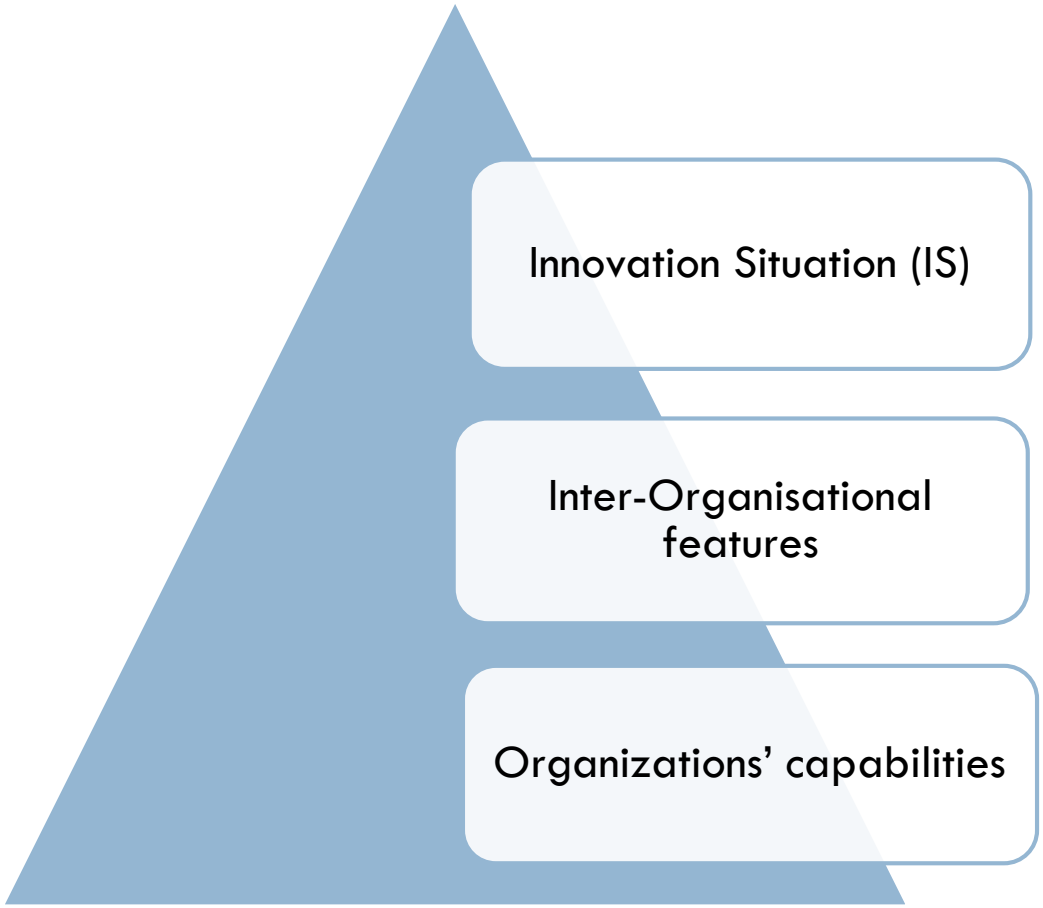
Literature Gap

- Observations made only in open innovation contexts, with pivotal organizations emerging as leader
- Nothing on how leadership and organized innovation network emerge, especially in context where organizations start from scratch , in agricultural sector in developing countries

→ **What is the role for strategic management in both the emergence *and* the strengthening of innovation partnerships in developing countries?**

Methods

Framework to explore managerial challenges in different innovation situations



Locus where different organizations interact with each other around activities and results that feed the innovation process, and where innovation management practices are developed

Nature and dynamics of relationships between organizations

Ability and willingness of organizations to contribute to collective activities

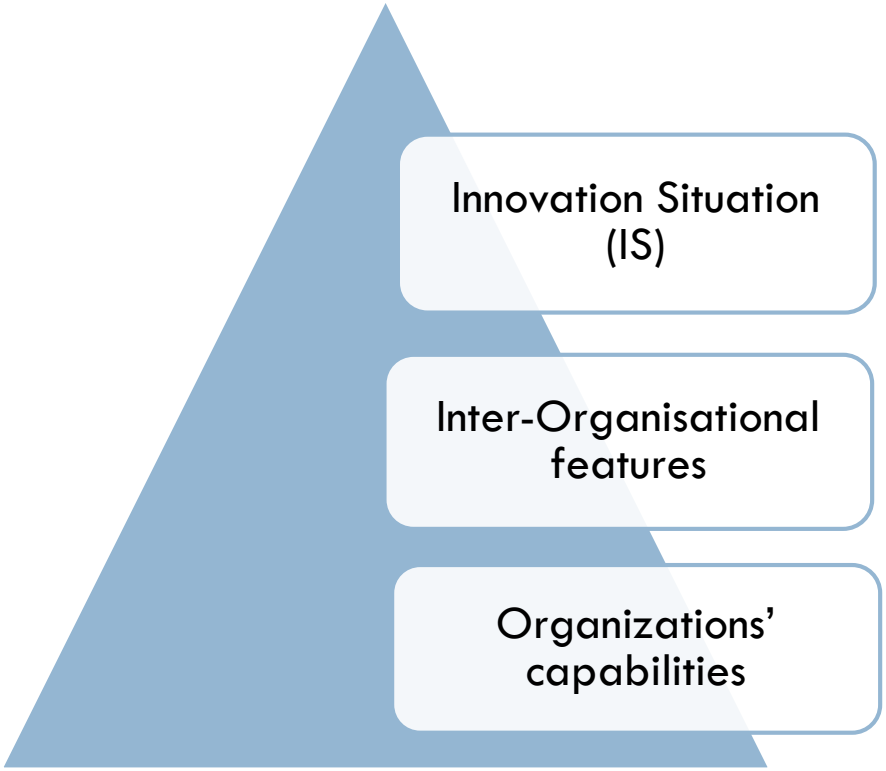
Analysis model : Indicators used based on litterature review

Levels	Variables to be explained	Items and description
Innovation situation	Innovation management Intensity	• Coordination practices • Knowledge management practices • M&E practices • Resources allocation practices
	Functions of the network	• Creation of spaces for creativity and experimentation • Circulation of knowledge or information • Promotion with external actors to facilitate upscaling
	Explanatory variables	**Items and description**
Innovation project	Type of innovation process	• Stage : initiation, up-scaling • Nature: incremental, radical
Inter-organization	Network structure	• Degree of mutual constraints between organizations • Frequency of interactions between individuals (daily, monthly, rare) • Existing Pivot (leading activities)
Intra-organization	Capabilities to contribute to the innovation process	• Motivations • Available resources invested in the innovation process • Level of acceptance of risks and uncertainty • Mode of collaboration with partners • Results that they produced

6 case studies in Burkina-Faso

Stage	Nature	Selected Innovation Situations (IS)		Short name	Start
Initiation	Radical	Development of **sunflower value chain**		SUNF	2009
	Incremental	**Drip systems** for small family farms		DRIP	2000
	Radical	**ICT in advisory services** provided by farmers' organizations		ICT	2013
Up-scaling	Incremental	**Family Micro-firms** innovative in **food processing,** and led by **women**		FMF	1985
	Incremental	**Local land charter** for breeding-agriculture integration		LLC	2012
	Radical	BioSPG: national **label for organic farming**		Bio-SPG	2011

Data Collection (qualitative * semi-quantitative): self-assessment at the three levels



- **Participatory Workshops**: collective assessment of challenges faced in the IS and existing management practices (about 20 respondants per IS, representative of all category of stakekeholders)

- **Individual questionnaires :** qualitative * quantitative evaluation of items

Findings

3 immediate results

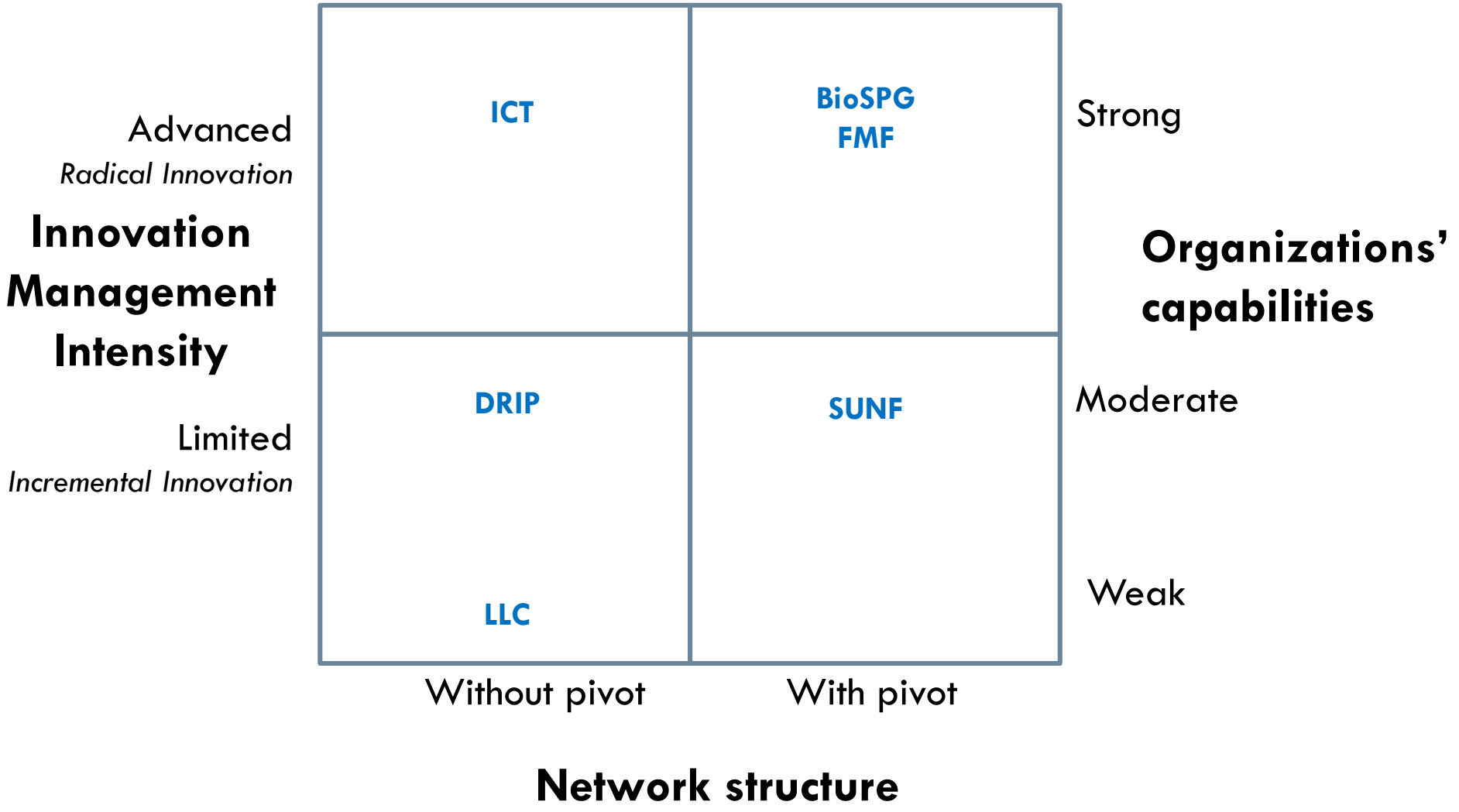
1) Innovation management practices at the collective level do exist in each case study:

- Advanced practices in radical innovation situations (BioSPG, ICT) with emphasis on coordination and M&E practices
- Poor management concerns mostly incremental innovations (DRIP, LLC) with particularly very limited M&E and resources allocation practices.

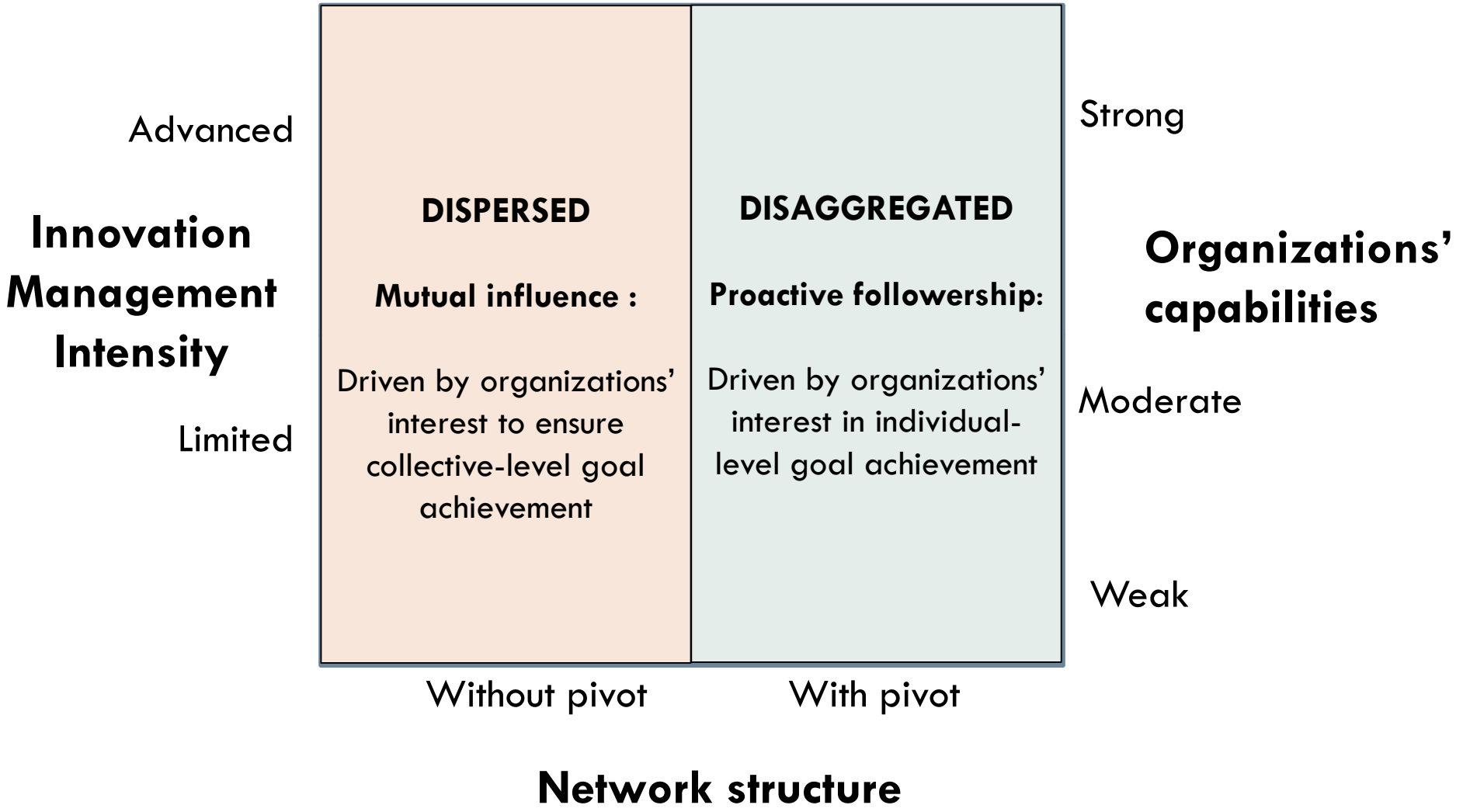
2) Gaps between activities led at the organizational level and at the inter-organizational levels are less important when the intensity of innovation management is higher

3) Self-assessment methods used for data collection were very useful for innovation partnerships' stakeholders in oder to identify their weaknesses and support needs

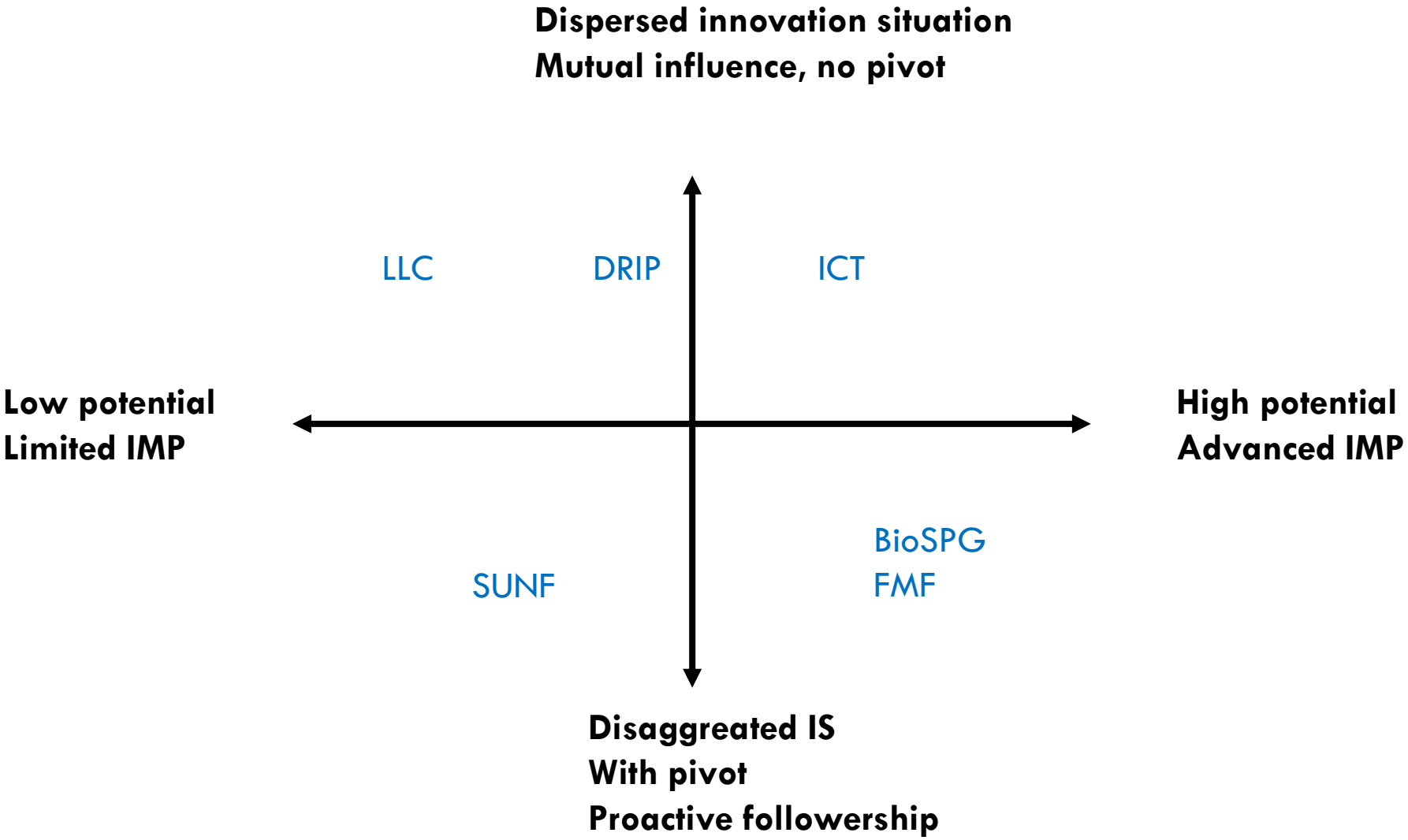
Four types of Innovation Situation (IS)



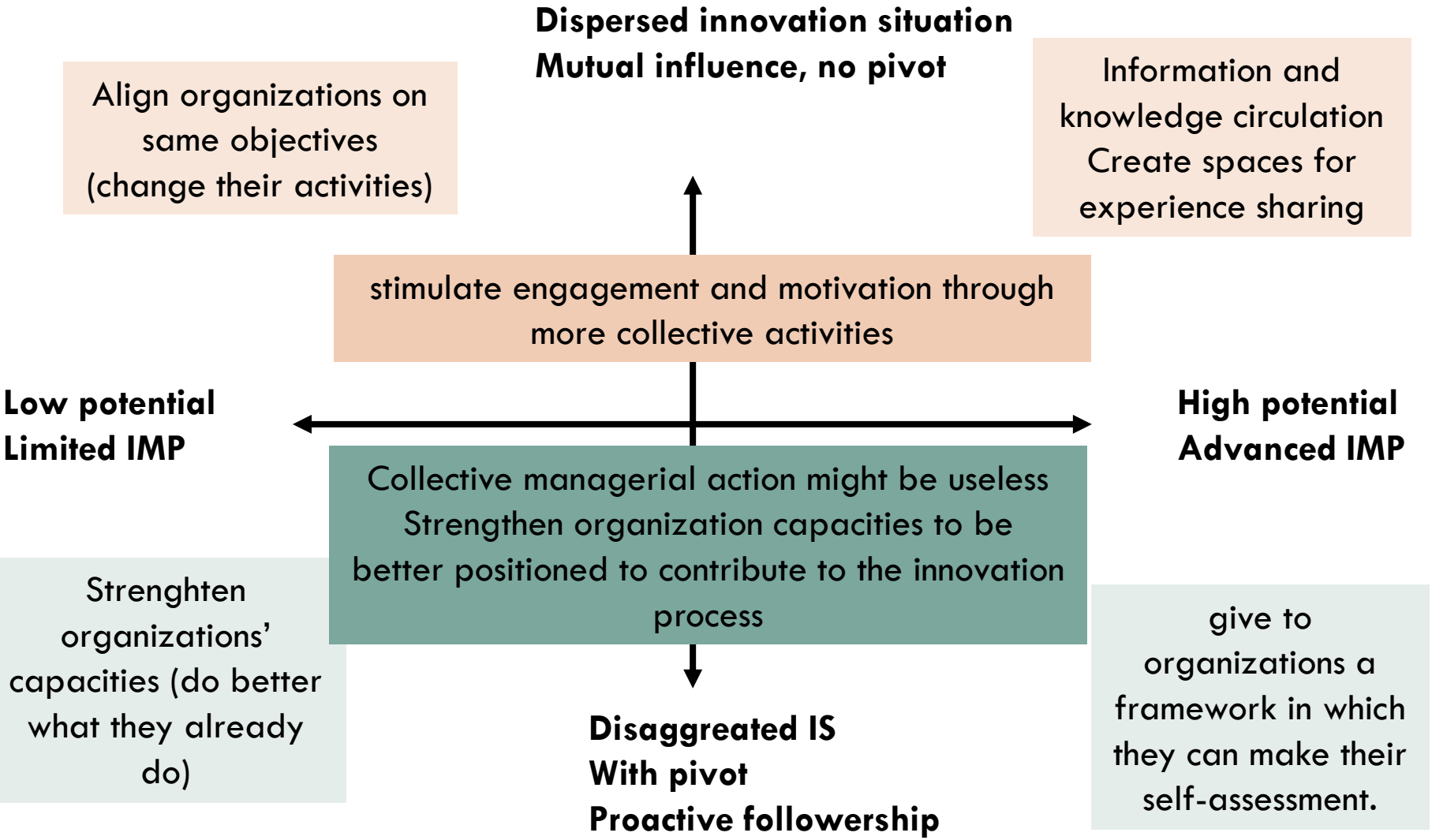
Two emerging coordination modes



Managerial challenges to achieve innovation (1/2)



Managerial challenges to achieve innovation (2/2)



Concluding remarks (1/2)

1) **According to the type of innovation situation, managerial challenges are not at the same level:**

- At the level of **each organization in disaggregated situations**
- At the level of the **network in dispersed situations**

2) **Importance of shared leadership**

- Not a collective team/partnership process, but rather a cross-level construct : this is individual organization who initiated mutual influence or proactive leadership which, in turn, involved one or several organizations

Concluding remarks (2/2)

3) **Feasibility of managerial support from the outside of the network?**

- No "one-size-fit-all" approach for supervised learning-based approaches
- The challenge is not to manage the innovation process but to manage the organizations' capabilities and interactions concerning the innovation process.

→ Support could be handled by **committees that will act both as a management and investigation body, as part of the innovation partnership,** in order to design and implement strategic planning with key organizations or network, in a continuous and targeted manner (Lenfle, 2004).

→ Still need to be tested for further managerial recommendations and impact evaluation

Thanks

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