

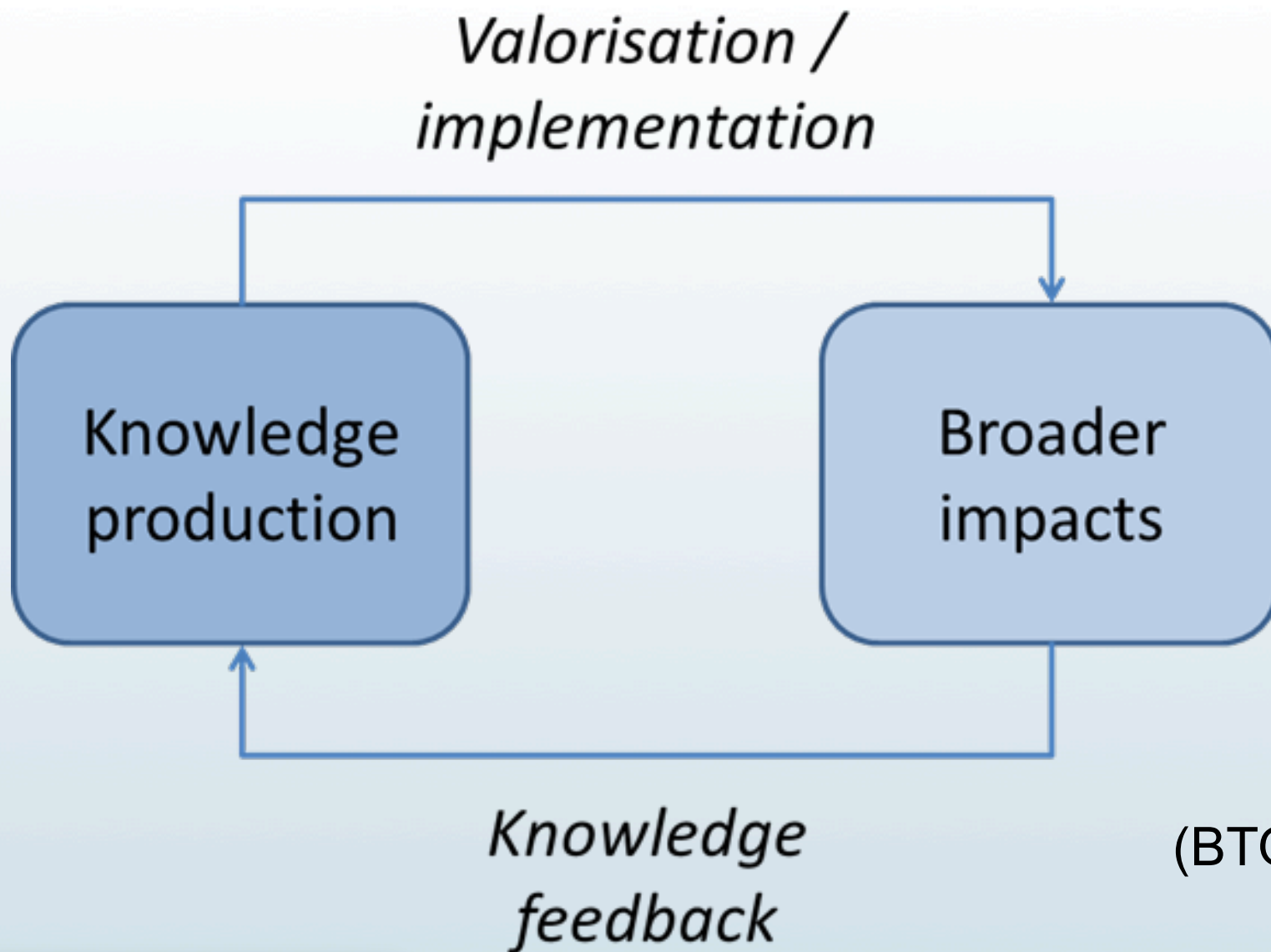


Cognitive benefits in research commercialization ent - spin-off synergies

*PRi conference
s, 8 June 2018*

Productive knowledge cycle'

igger picture



(BTO report 2016.098)

Existing literature on spin-off - parent interactions

Overview

et al. (2013) distinguishes four types of interaction dynamics : Manifest segregative; Delayed segregative; Interactive; Delayed interactive

et al. (under review) identified 14 'university-startup interaction practices', including collaborative academic consulting and piloting

al. (2010) found four types of benefits for parent organizations: Reputation, Access to funding, Knowledge

Evidence on relationship between entrepreneurship and research productivity (Lowe and Gonzalez 2007; Buenstorf 2009)

Existing literature on spin-off - parent interactions

Analysis

Literature mainly deals with benefits for spin-off firm

Literature focuses mainly on financial/business aspects: hardly any attention for non-financial benefits

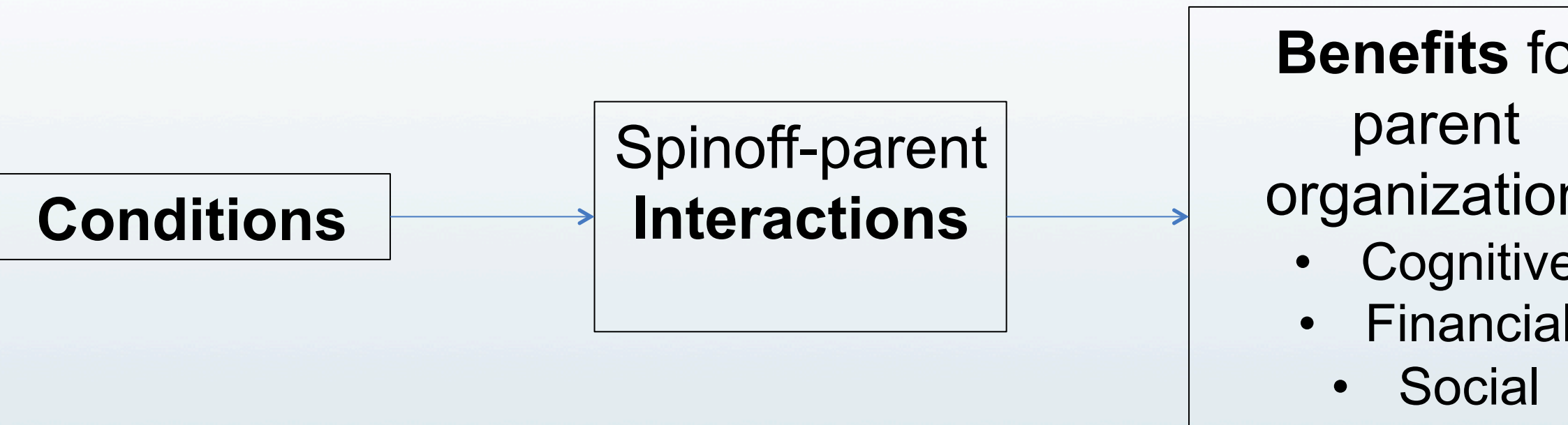
Little is known about knowledge feedback mechanisms

and research question

this study is to contribute to the understanding of knowledge feedback mechanisms in the innovation system, by analyzing interactions between spin-off firms and their parent organizations

research question: what conditions are required for research organizations to realize cognitive benefits from interactions with their spin-off firms?

Conceptual model (1/2)



Conceptual model (2/2)

Inputs:
research interests
time horizon
research culture
physical proximity
individual characteristics
(Zomer et al. 2010; Treibich et al. 2016)

Interactions:

1. Organisational relationship
2. Research collaboration
3. Other collaboration
4. Common PR
5. Personal contact

(Treibich et al. 2013; Van Stijn et al. under review; Zomer et al. 2010)

Cognitive benefits:

1. Data
2. Insights
3. Agenda
4. Reflexivity

(Van Stijn et al. under review; Zomer et al. 2010; Treibich et al. 1992)

ses: 13 interviews

ploratory study

organization	Spinoff firm	Country
	Fistuca	The Netherlan
l Technical University	(IO Environmental Solutions)	Turkey
	LeAF	The Netherlan
nte)	NXFiltration	The Netherlan
sity College Dublin	Oxymem	Ireland
e	(Water Footprint)	The Netherlan
s	AquaBattery	The Netherlan
s University	Forward Water Technologies	Canada

Positive benefits

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Direct benefits

Broader and more relevant research agenda (7/7)

Both applied and fundamental questions

Insights (6/7)

Influence of real-world conditions

Factors, interests and institutions

Activity and motivation (6/7)

'Reflection on your own aims and activities'

Understand usability for end-users

General motivation

Other benefits

- Access to data (4/7)

Risks

- Undesirable delimitation of research agenda

actions

gs

Key interactions

Cooperative research (6/8)
Multilateral and consortia
From PhD-projects to consultancy projects
Across the whole research cycle
Personal contact (overlap) (6/8)
Part-time positions for senior staff
Frequent hiring
PhD students as knowledge carriers

Other interactions (incidental)

- Formal structures
- Common PR
- Licensing or transfer of IP
- Equipment sharing

Conditions for fruitful interactions

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Factors

Personal characteristics (social proximity) (6/8)

Task similarity (cognitive proximity) (5/8)

Geographical proximity (4/8)

Other factors

- Cooperative IP arrangement
- Research quality
- Expectations management
- Institutional environment

Not (often) significant

- Similar time perspective: these are usually
but can be overcome

conclusions

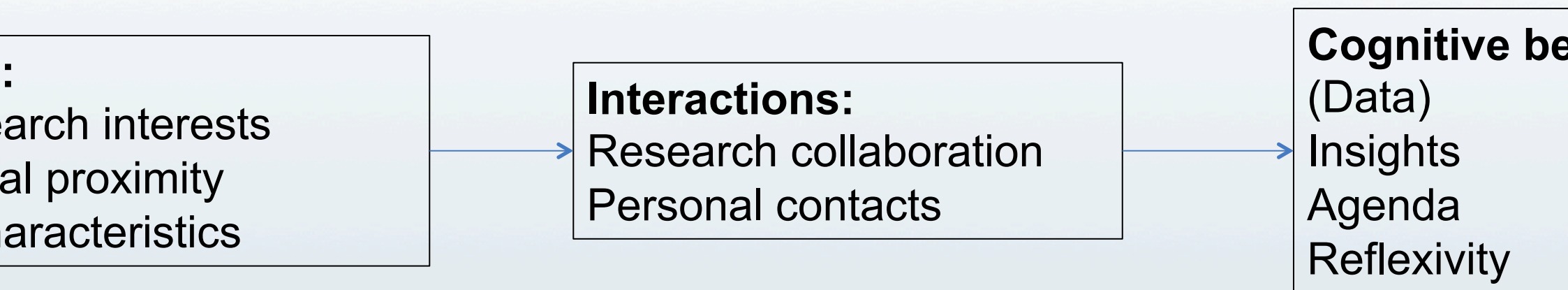
organizations do gain cognitive benefits from spin-off interactions, in particular in terms of new insights and agenda-setting

are important carriers of knowledge and information

from similar research interests, geographical proximity and personal characteristics matter

spin-off interactions can be risky: undesirable limitation of research agenda

Summary: how to generate cognitive benefits from network - spin-off interactions?



ussion (1/2)

-cognitive benefits observed:

reputation and legitimacy

direct access to funding

professional development and career perspectives

cy implications:

cherish cognitive dimension of parent – spin-off interactions

do not only support spin-off creation, but also collaboration and staff

exchange with parent organization

ussion (2/2)

ommendations for further research:

- Costs versus benefits of parent – spin-off research collaboration
- Study sectoral variation and influence of national context
- Negative cases

Financial and social benefits (and scope of this analysis)

Direct benefits

Direct funding by acting as consortium
Building networks, in particular with industry
Innovation
Improves valorization capacity

Incidental benefits

- Direct funding
- Attractiveness of education program