

# INNOVATION PROCESSES IN A DIGITIZING WORLD

Hans Berends

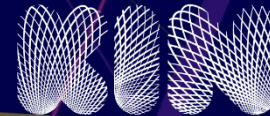
Digital Innovation Summit, May 23, Amsterdam



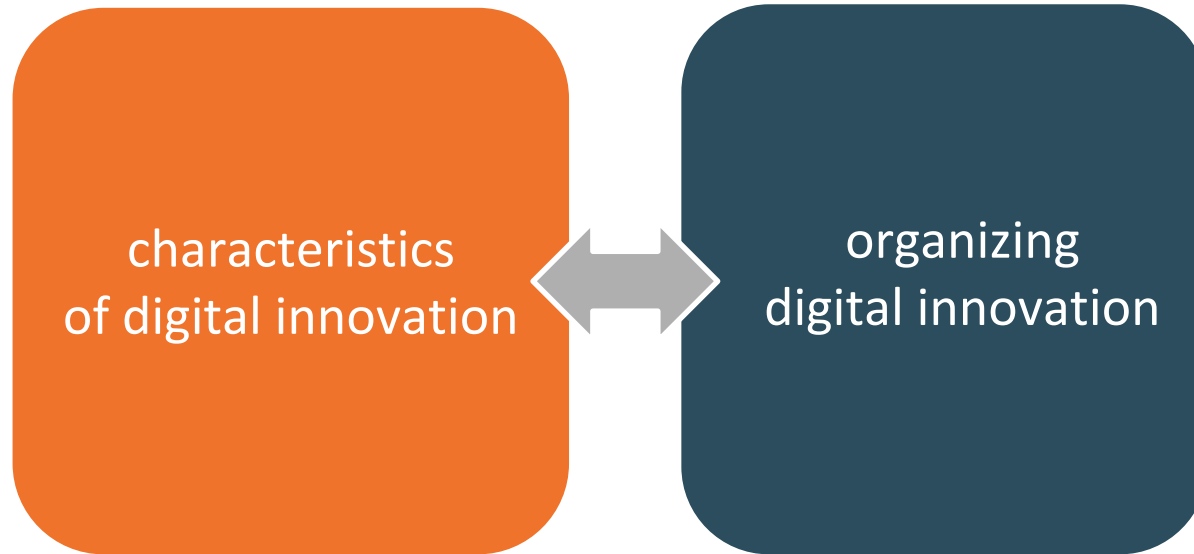
VRIJE  
UNIVERSITEIT  
AMSTERDAM

School of Business  
and Economics

#DIS2019NL

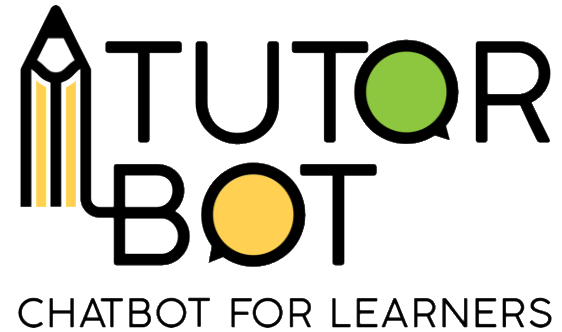
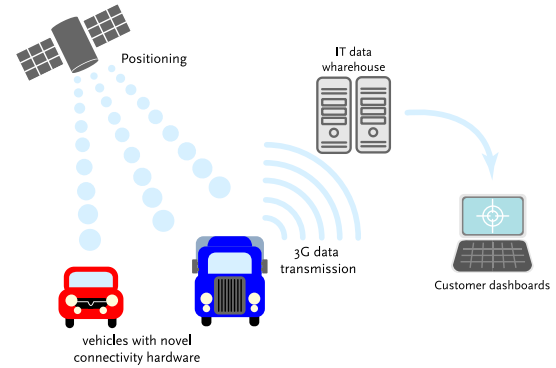


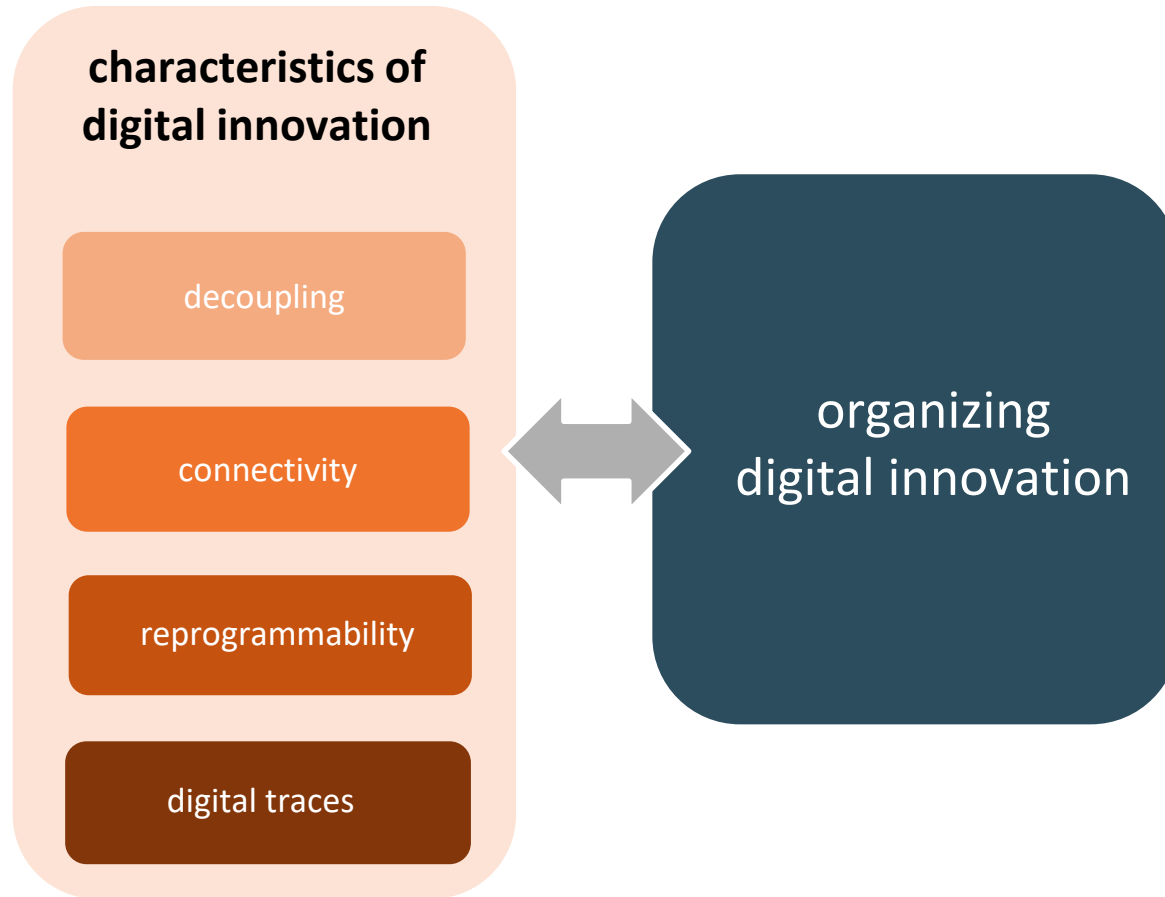
Center for  
Digital  
Innovation



DIGITAL  
INNOVATION

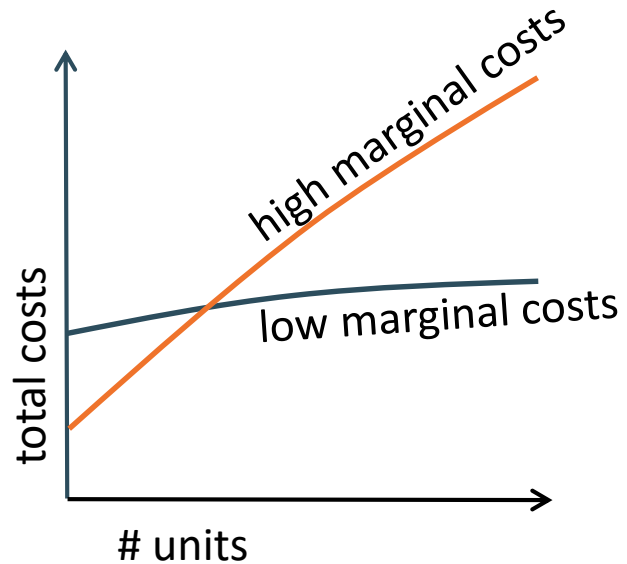
use of digital technology in new  
products, services, business  
models, and business processes



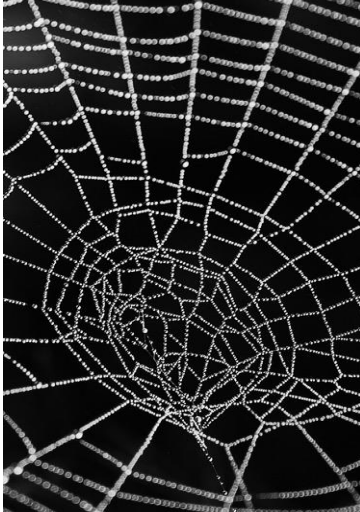


# DECOUPLING

- decoupling of **content** and **medium**
- consequence: **low marginal costs**
- and **convergence**



# CONNECTIVITY



**USERS**  
direct  
network effects

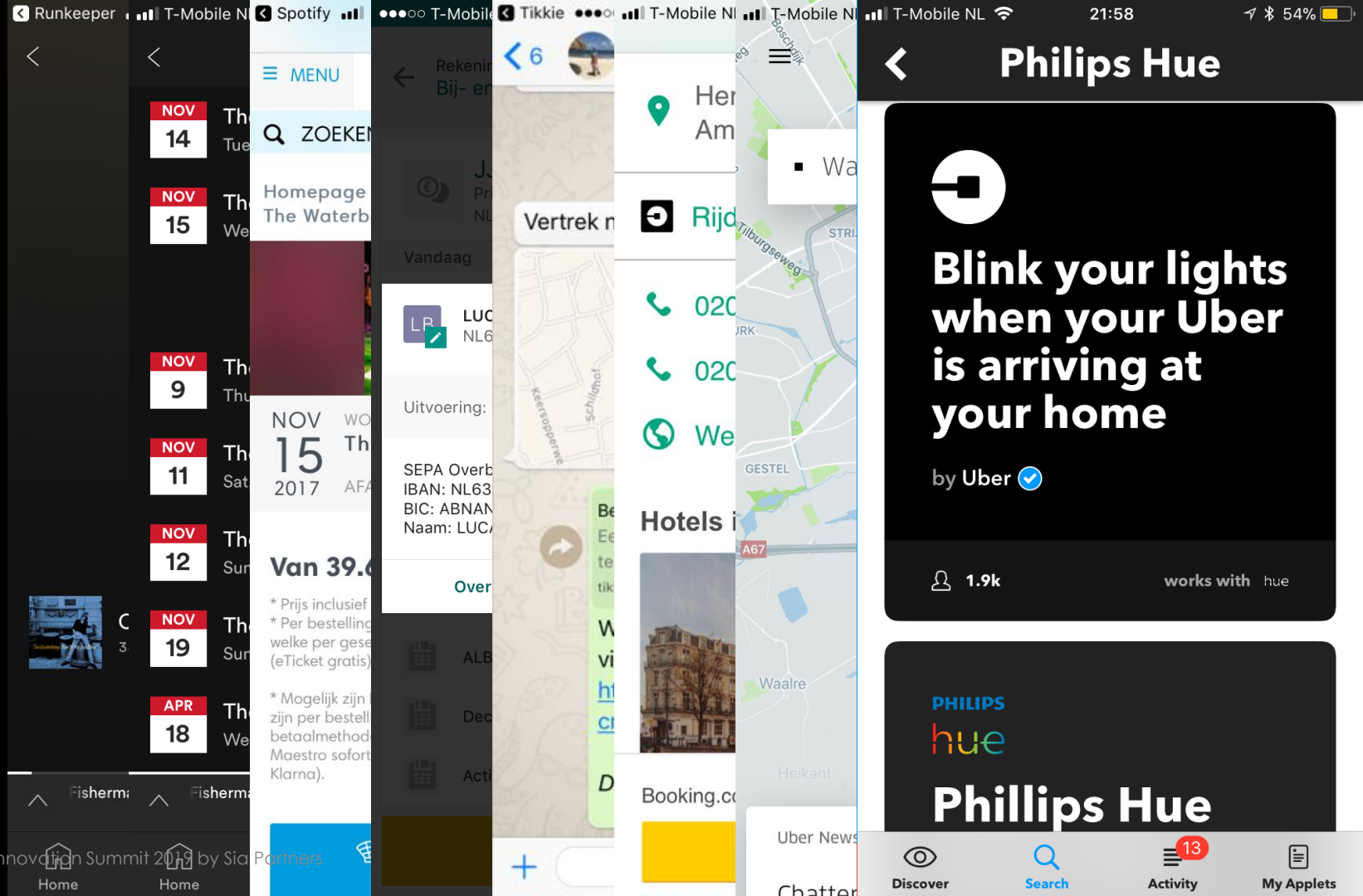


**PRODUCTS**  
indirect  
network effects



**PROVIDERS**  
ongoing  
service delivery







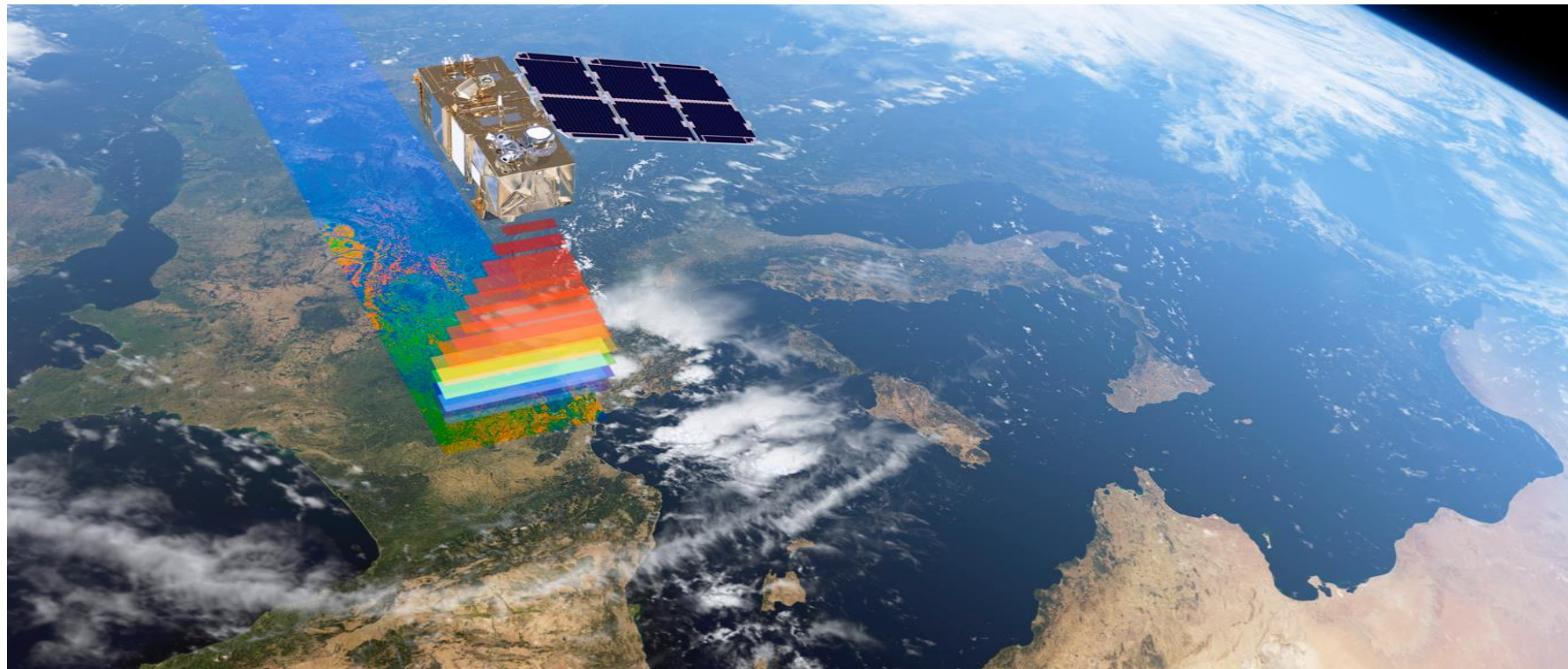
# REPROGRAMMABILITY

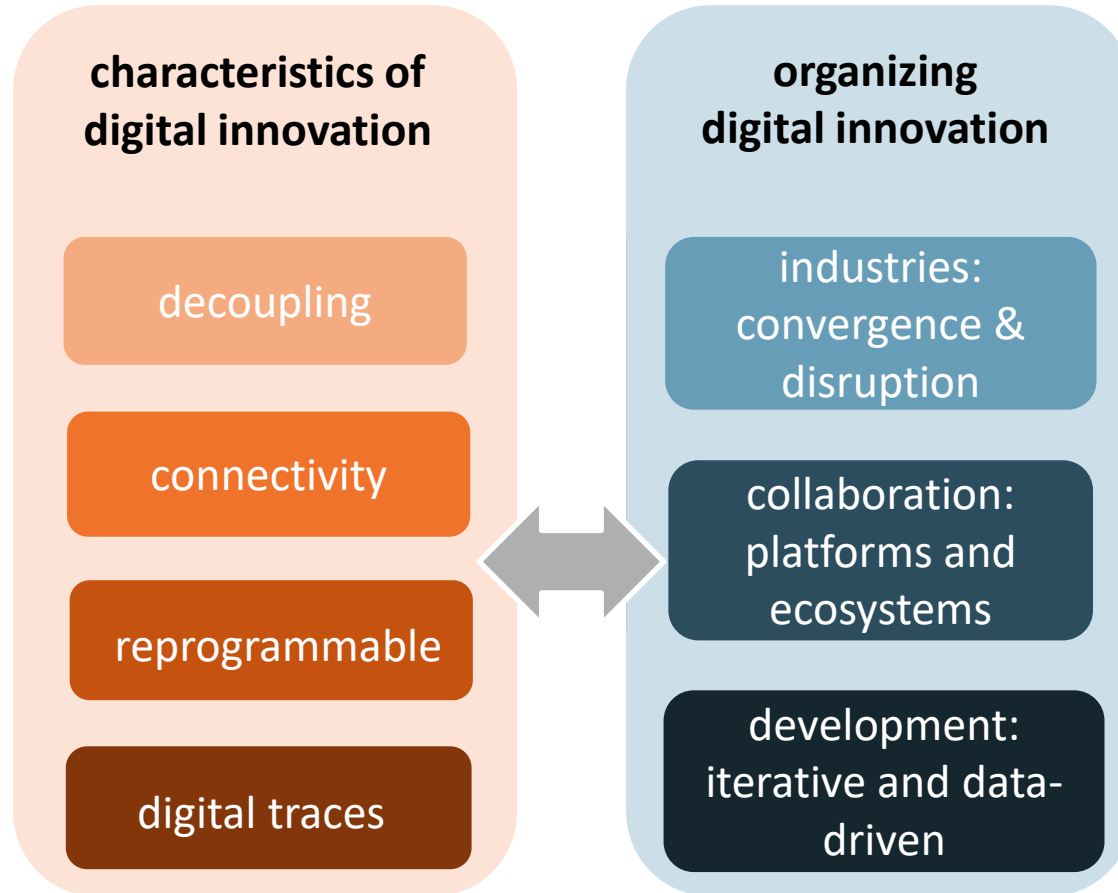
- decoupling of **form** and **function**
- leads to **generativity**

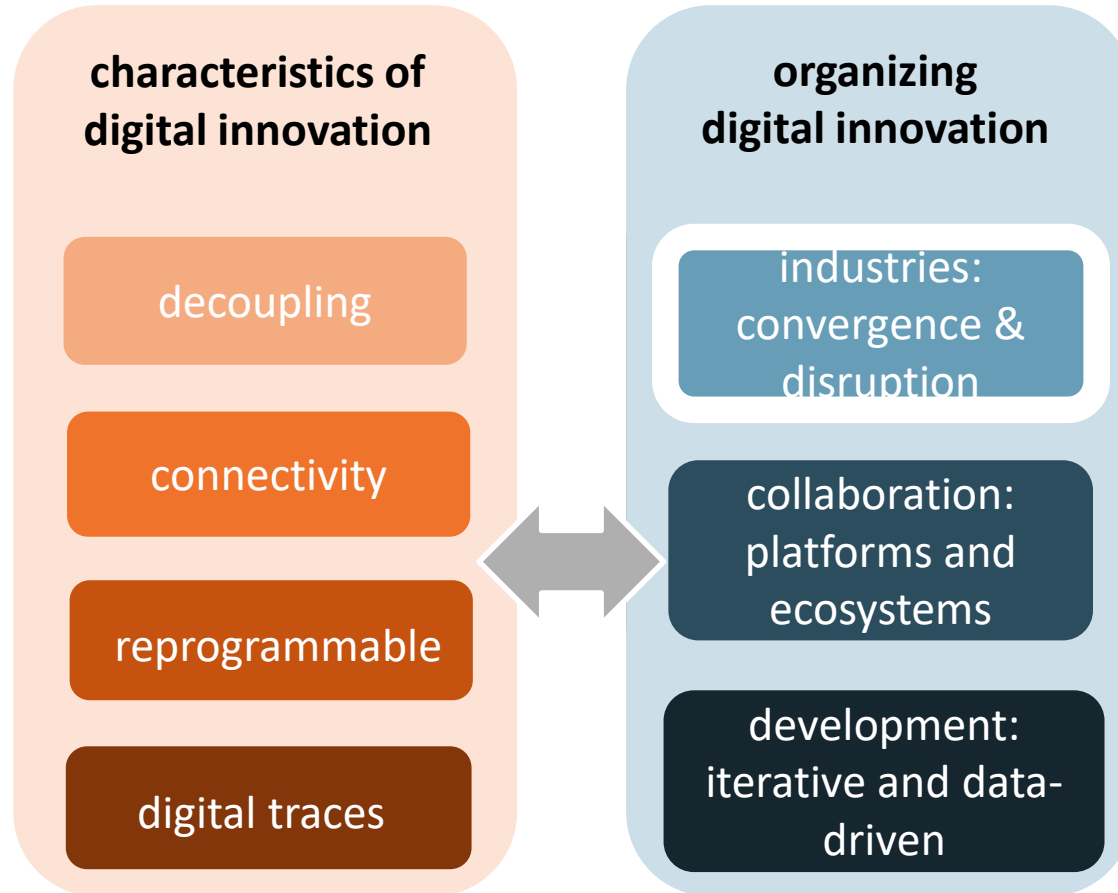


“We did the first software update of a light bulb in 136 years since they were first invented. That is exciting!”  
(George Yianni, Philips Hue)

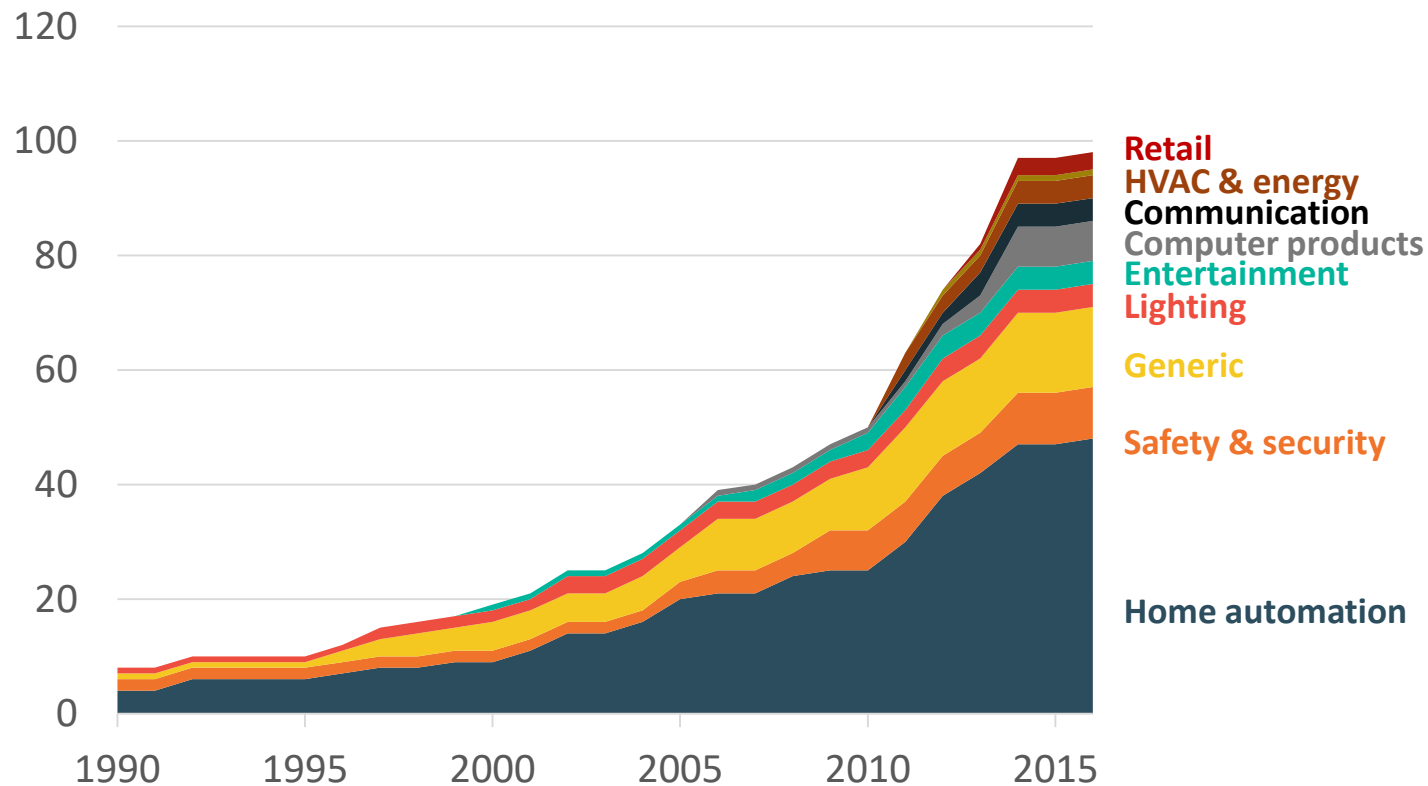
# DIGITAL TRACES



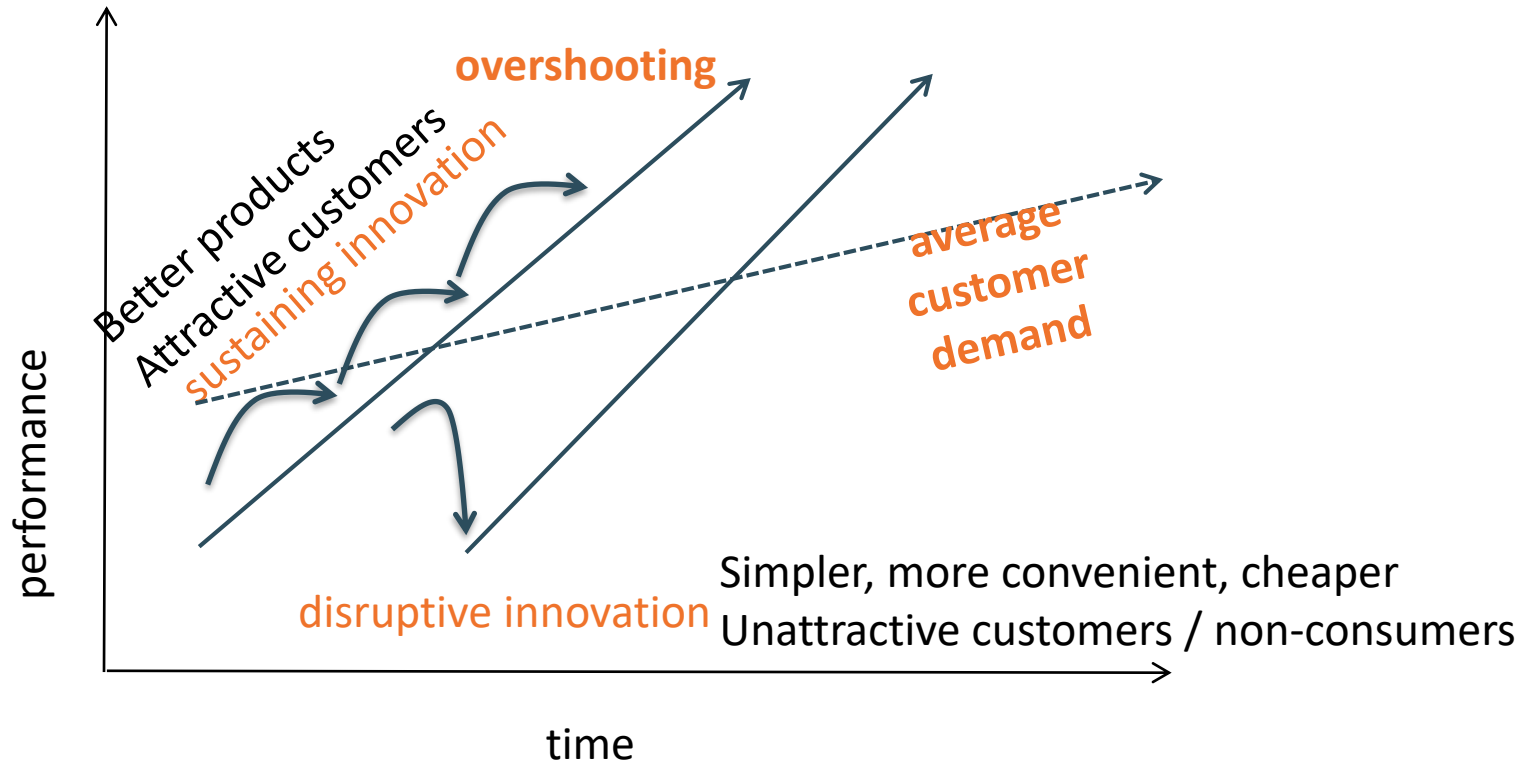


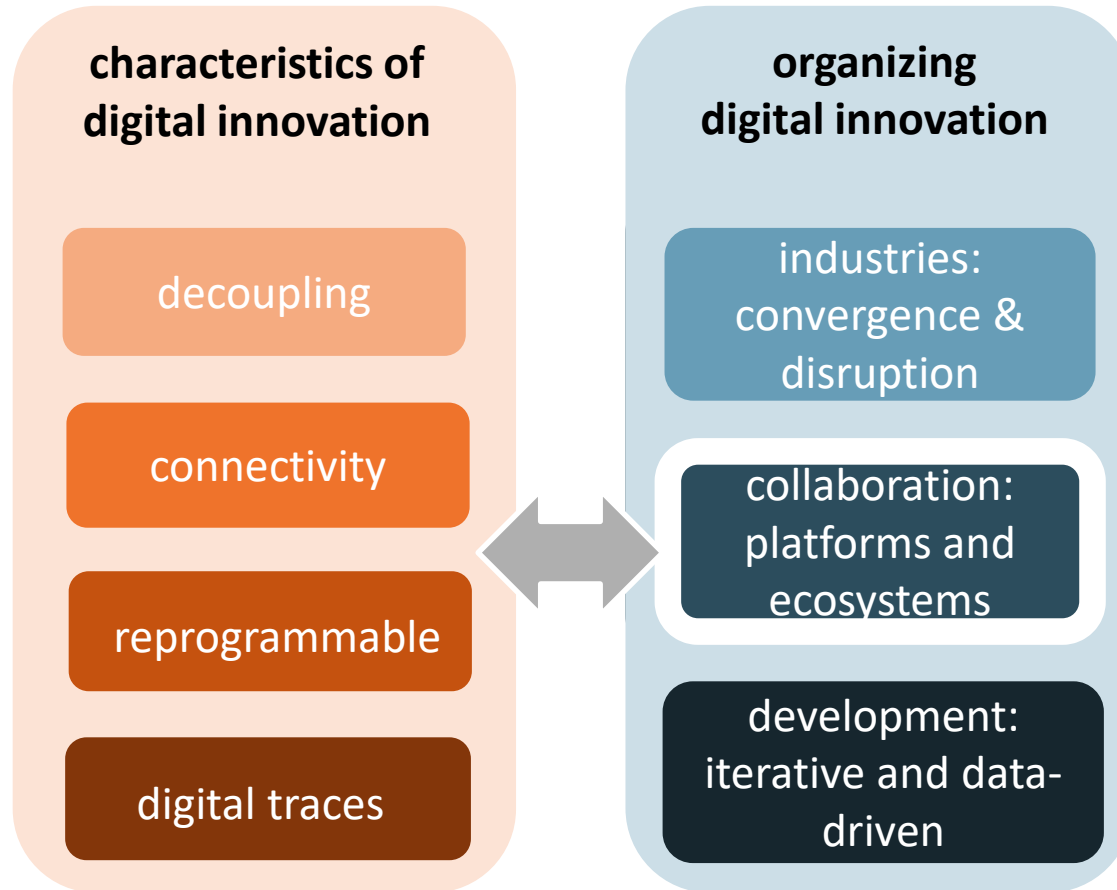


## CONVERGENCE: SMART HOME PLATFORMS



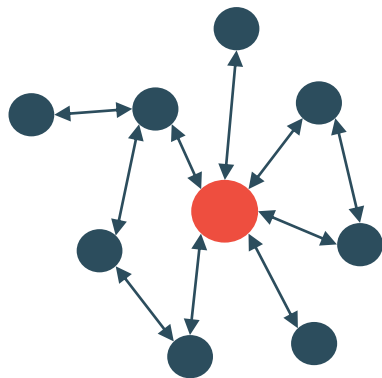
# SUSTAINING AND DISRUPTIVE INNOVATION





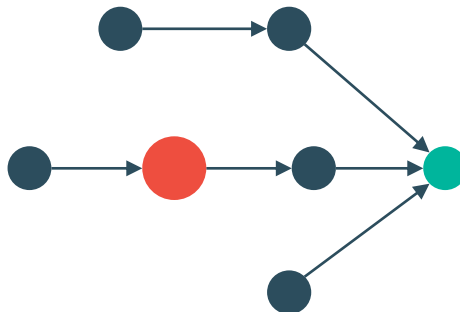


# COLLABORATION IN INNOVATION ECOSYSTEMS



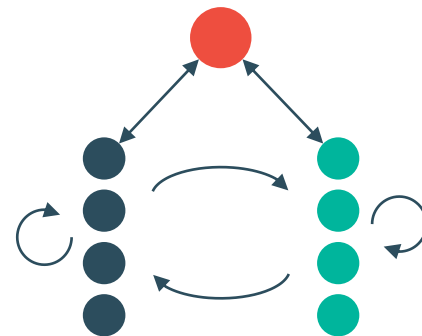
## KNOWLEDGE ECOSYSTEM

integration through  
shared knowledge  
domain



## BUSINESS ECOSYSTEM

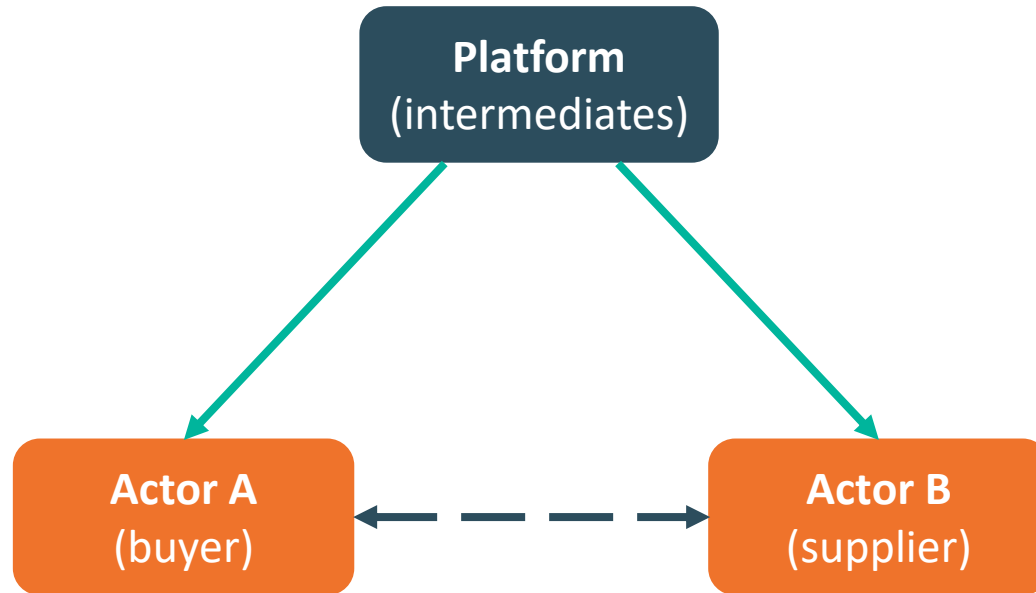
integration around  
value proposition

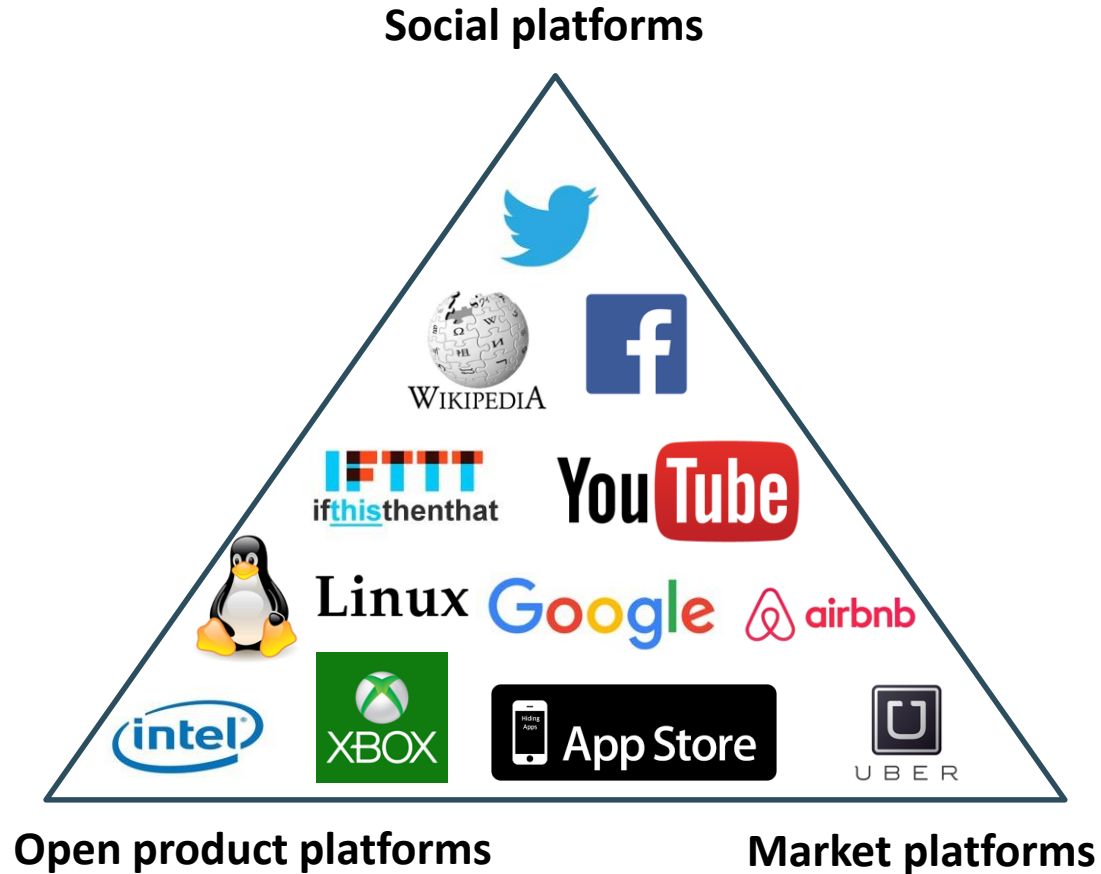


## PLATFORM ECOSYSTEM

integration through  
platform architecture  
and interfaces

## PLATFORM: TWO-SIDED MARKET





# BENEFITS OF (DIGITAL) MULTISIDED PLATFORMS



reduction of  
**transaction costs**

Searching  
contracting  
monitoring



**bundling &  
unbundling**

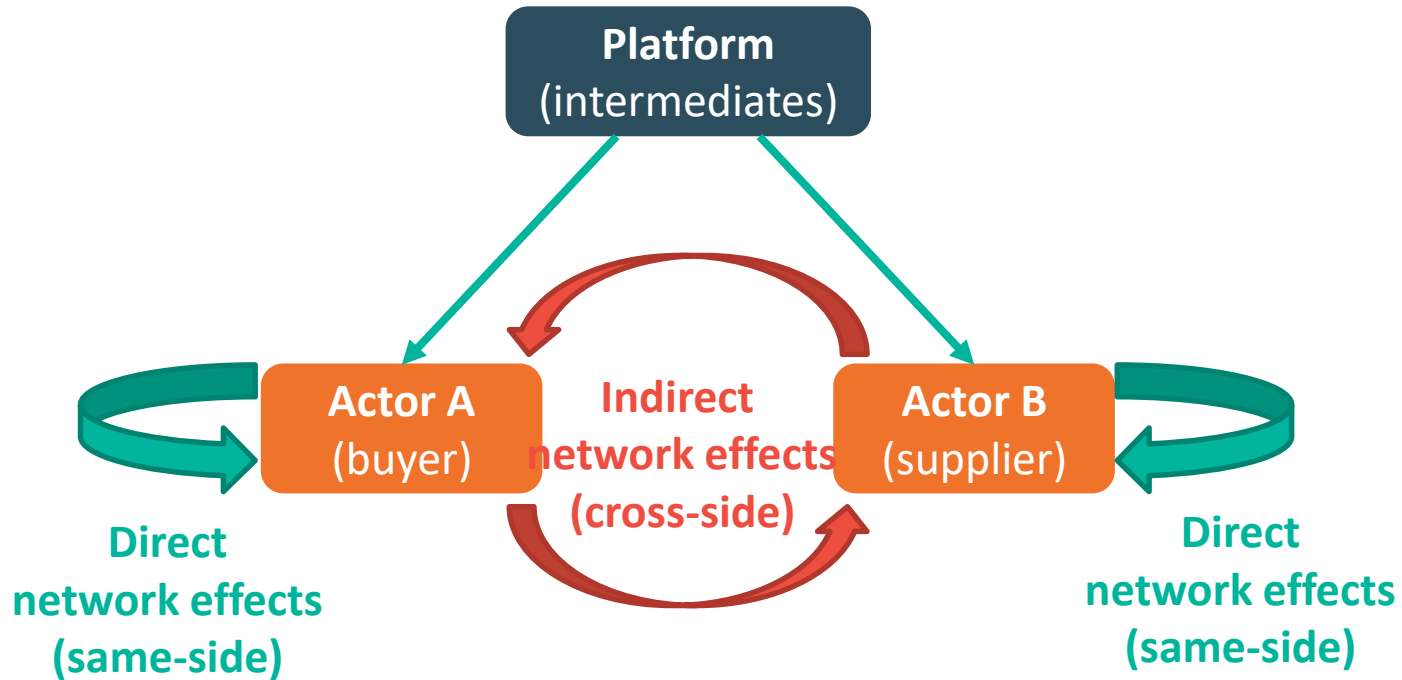


**leverage**  
(underutilized)  
**external  
resources**



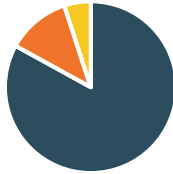
rapid **scaling**  
through lower  
**resource needs**

## DIFFERENT TYPES OF NETWORK EFFECTS



# FEW PLATFORMS TAKE MOST OF THE MARKET...

Messaging Apps  
(The Netherlands, 2018)



■ WhatsApp ■ Facebook Messenger ■ Others

Mobile Operating Systems  
(US, 2018)



■ iOS ■ Android ■ Others

Streaming Music Services  
2017



■ Spotify ■ Apple Music

Social Networking  
(2017)



■ Facebook ■ Twitter  
■ VK ■ Instagram

Video game consoles  
(2017)



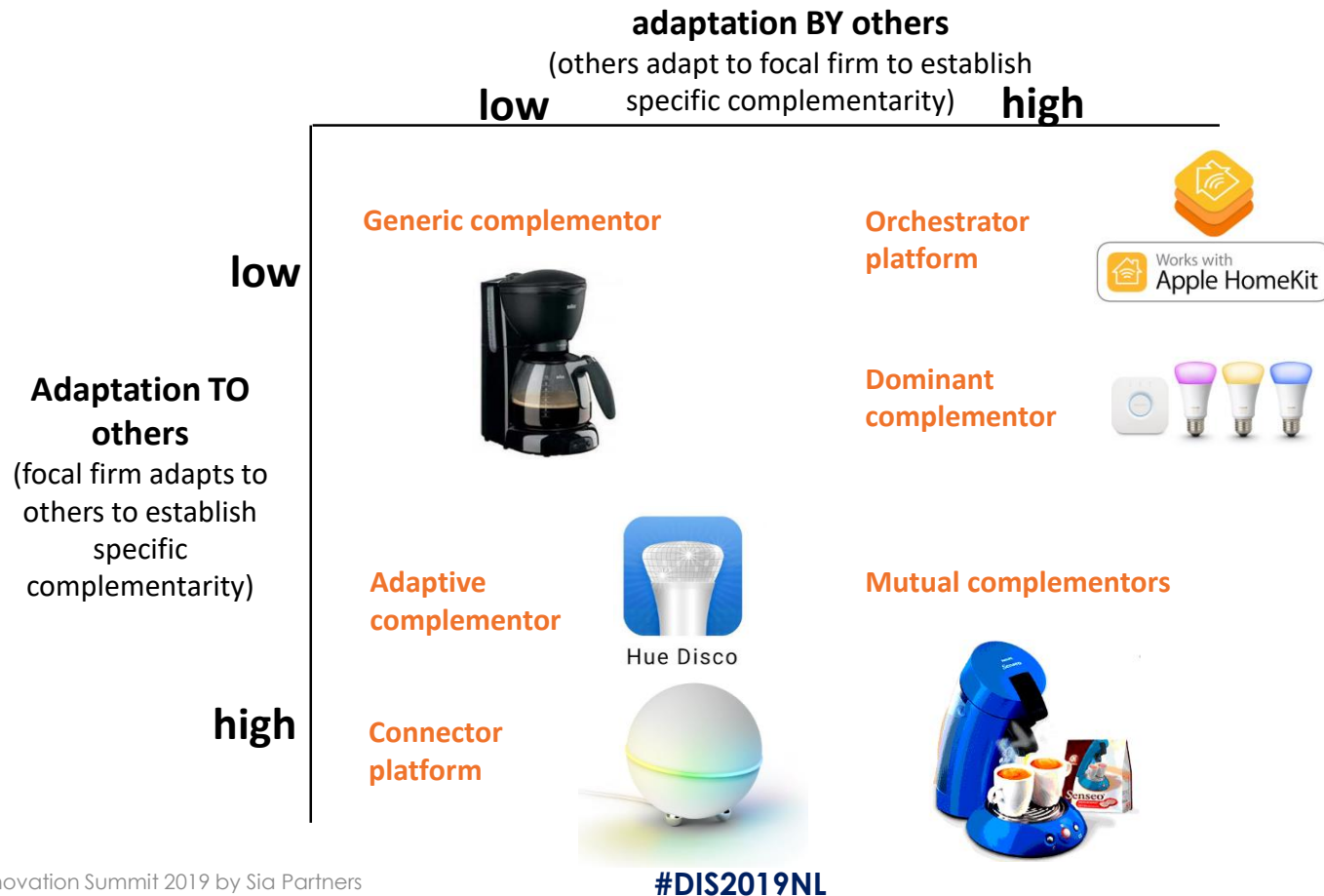
■ Sony Playstation 4

Crowdfunding Platforms  
(The Netherlands, 2017)

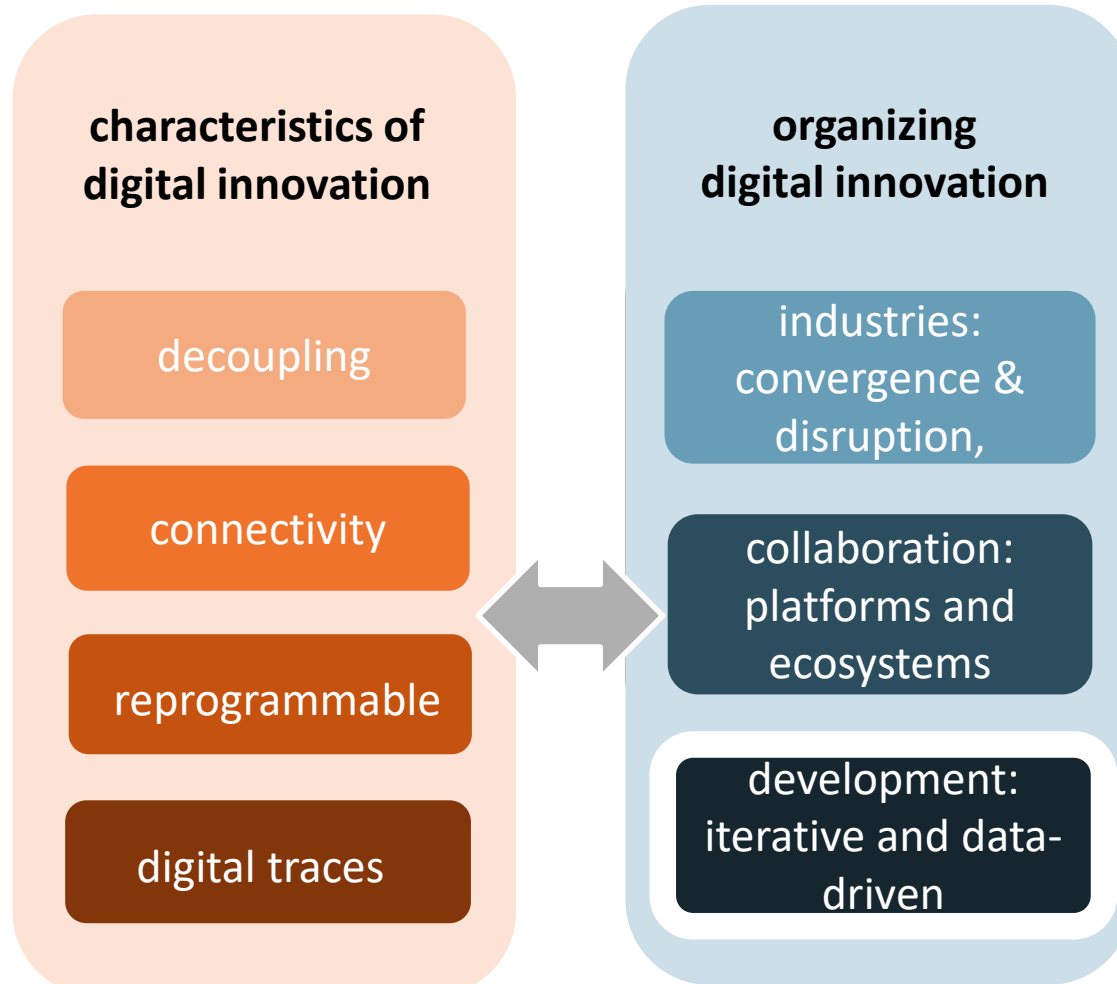


■ Collin Crowdfund ■ Duurzaaminvesteren  
■ Funding Circle ■ Geldvoorelkaar

# COMPLEMENTARITY STRATEGIES









## DEVELOPMENT OF DEVELOPMENT APPROACHES



**effectuation** to create new opportunities  
**experimentation** to reduce uncertainty  
**design thinking** to focus on user value  
**time-pacing** for rhythmic progress  
**iteration** to harness learning

# BARRIERS TO DIGITAL INNOVATION



**technology  
push**



**product  
mindset**



**myopic focus**



**organizational  
silos**

# Digital innovation & transformation (DIT)

Executive education program



Center for  
Digital  
Innovation

**Looking beyond the hypes!**

Key benefits of our program:

- learn the latest insights, theories and models on DIT
- develop competencies to design, implement and manage DIT
- critically reflect on the consequences of DIT in practice

