



DIHNET.EU

Europe's Network of Digital Innovation Hubs

Business models for research infrastructures

Maurits Butter (TNO)

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European Union
European Regional
Development Fund

TNO innovation
for life

tecnalia Inspiring
Business



eu ROBOTICS

BLUMORPHO
Create value with all forms of innovation



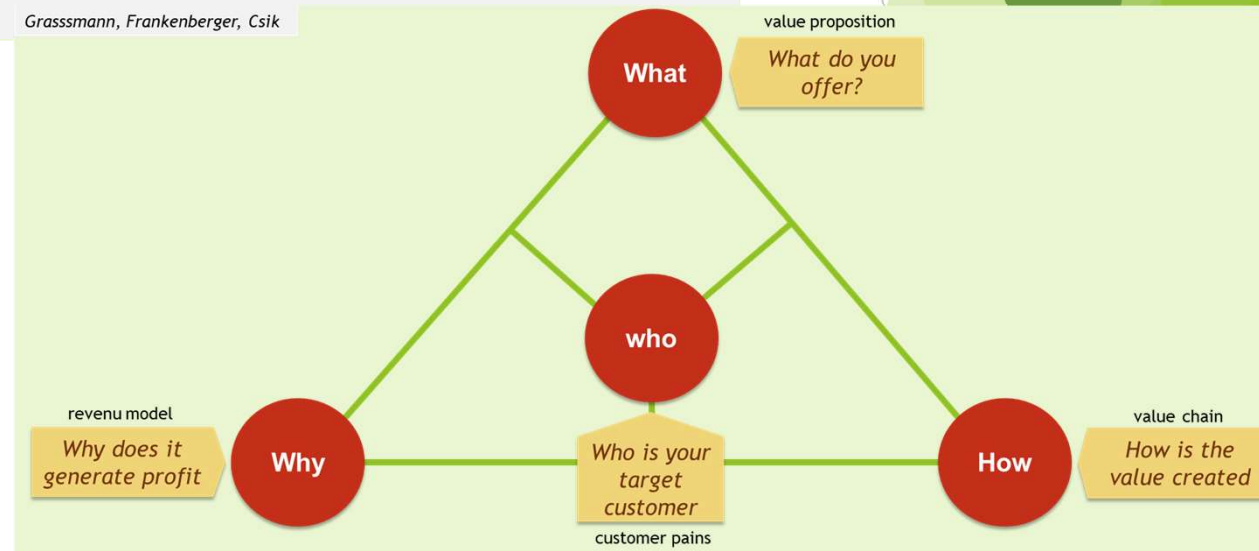
Two views on business models for research infrastructures

- ▶ Business models to ensure economic sustainability of the research infrastructures
- ▶ Business models for European collaboration between (regional) research infrastructures

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Grassmann, Frankenberger, Csik



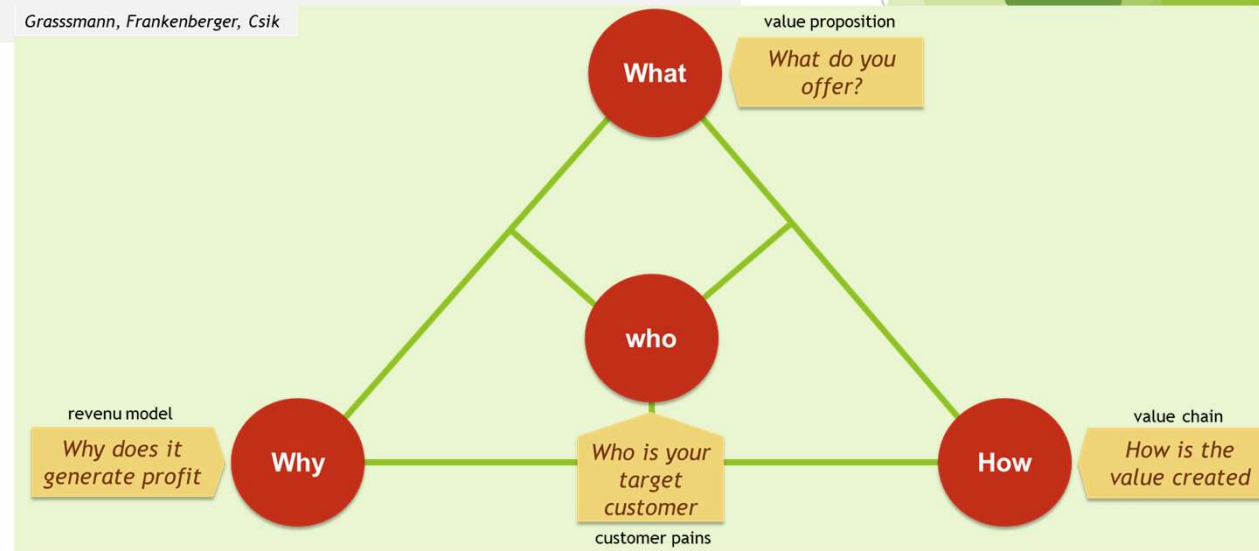
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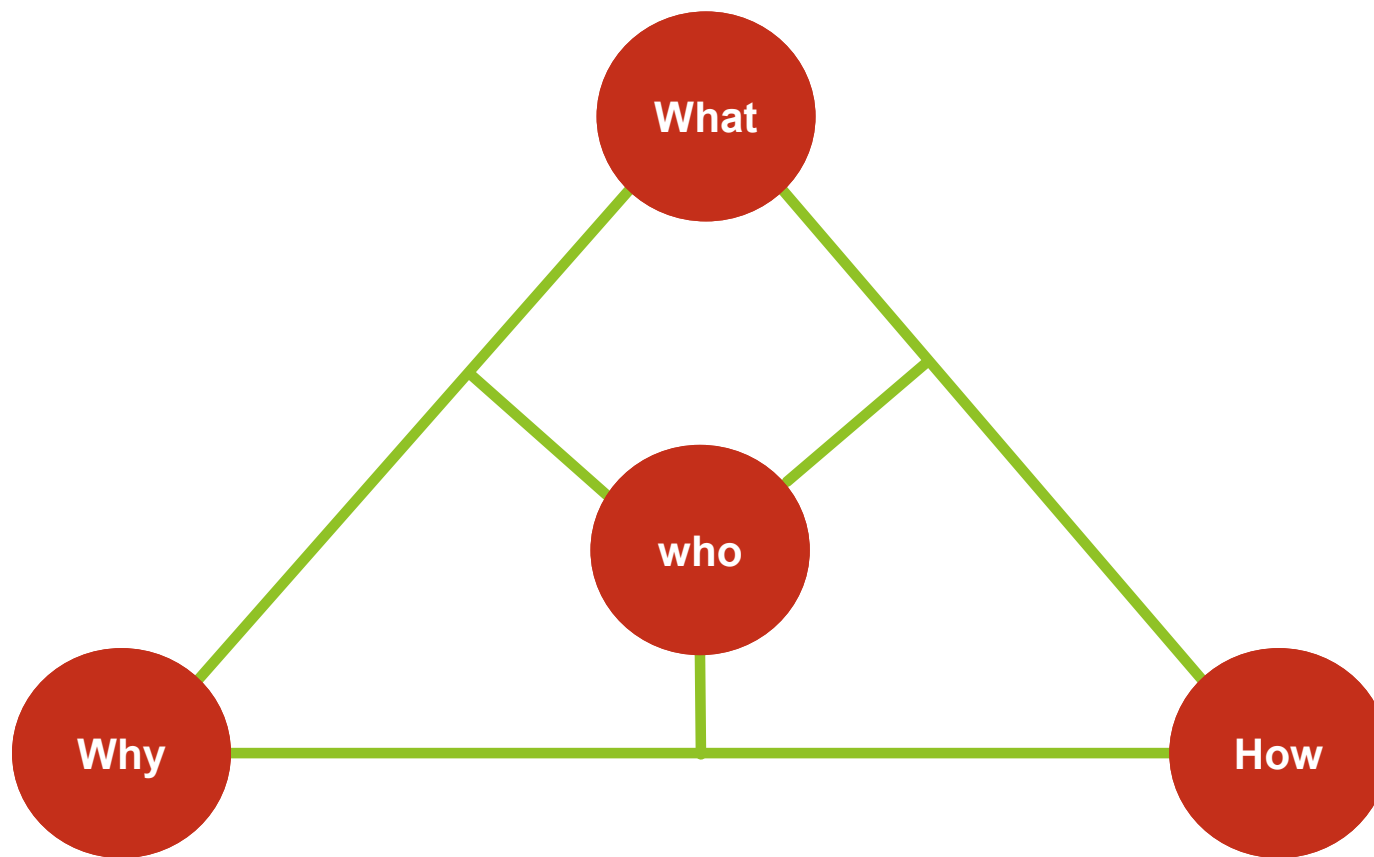
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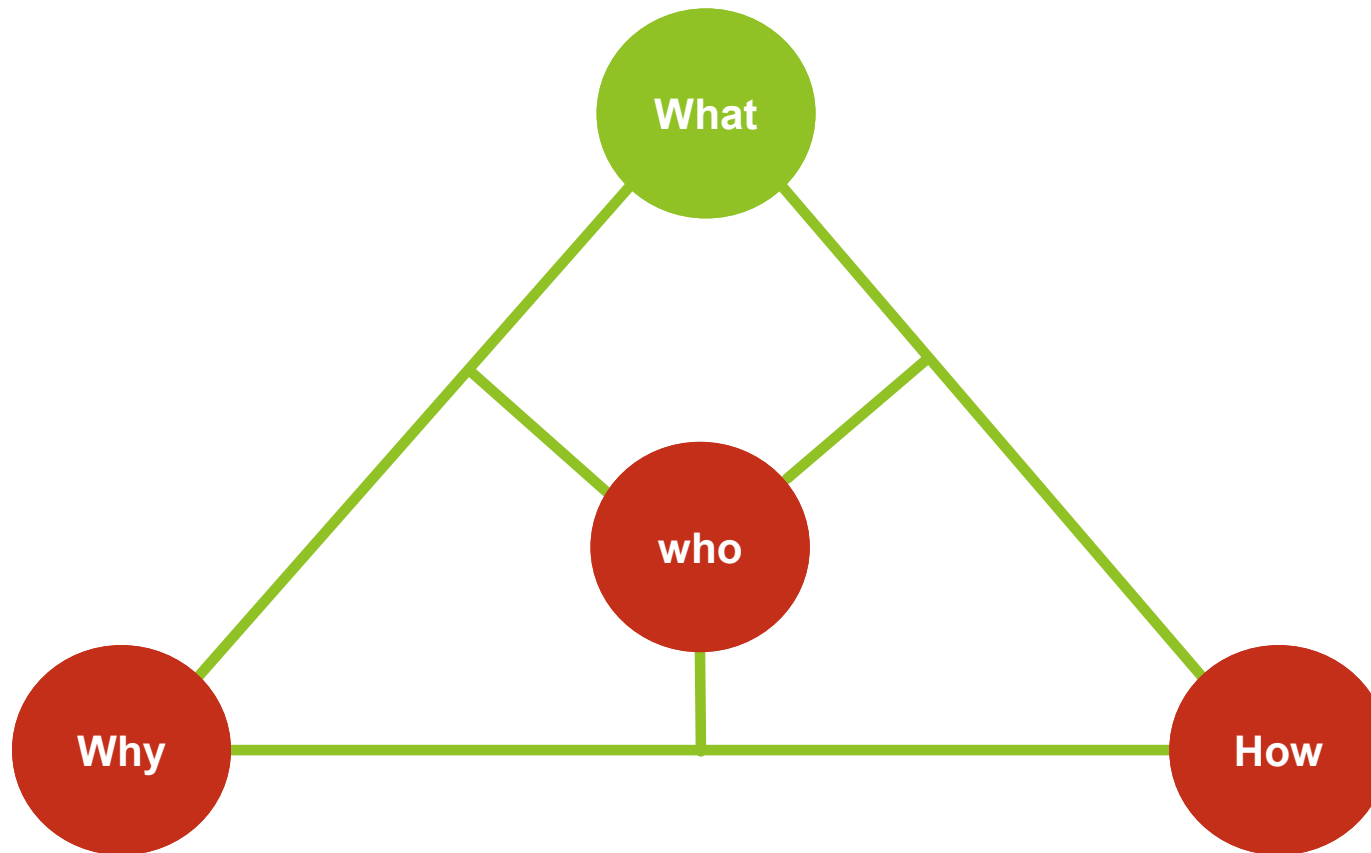
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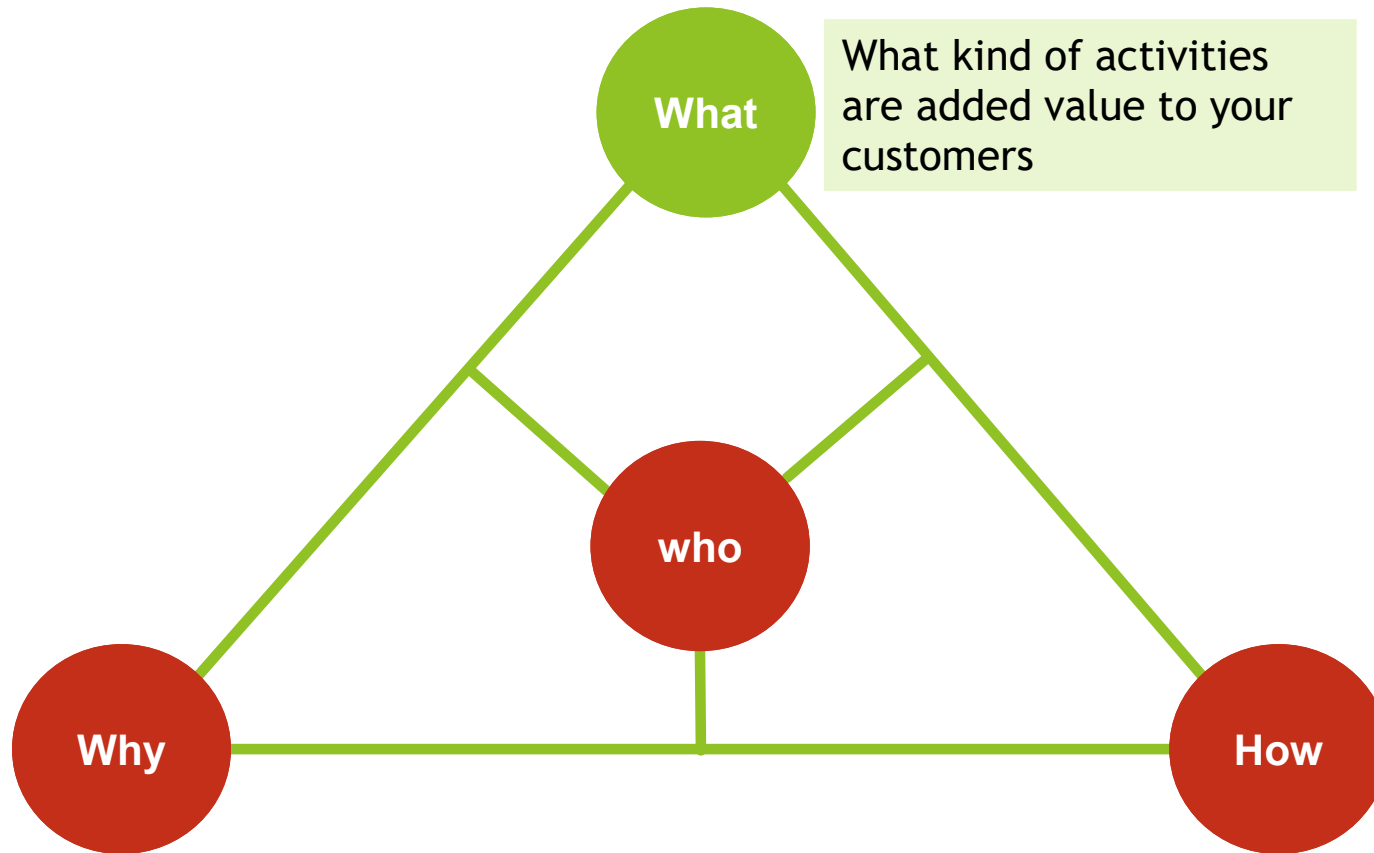
Business model for research infrastructures



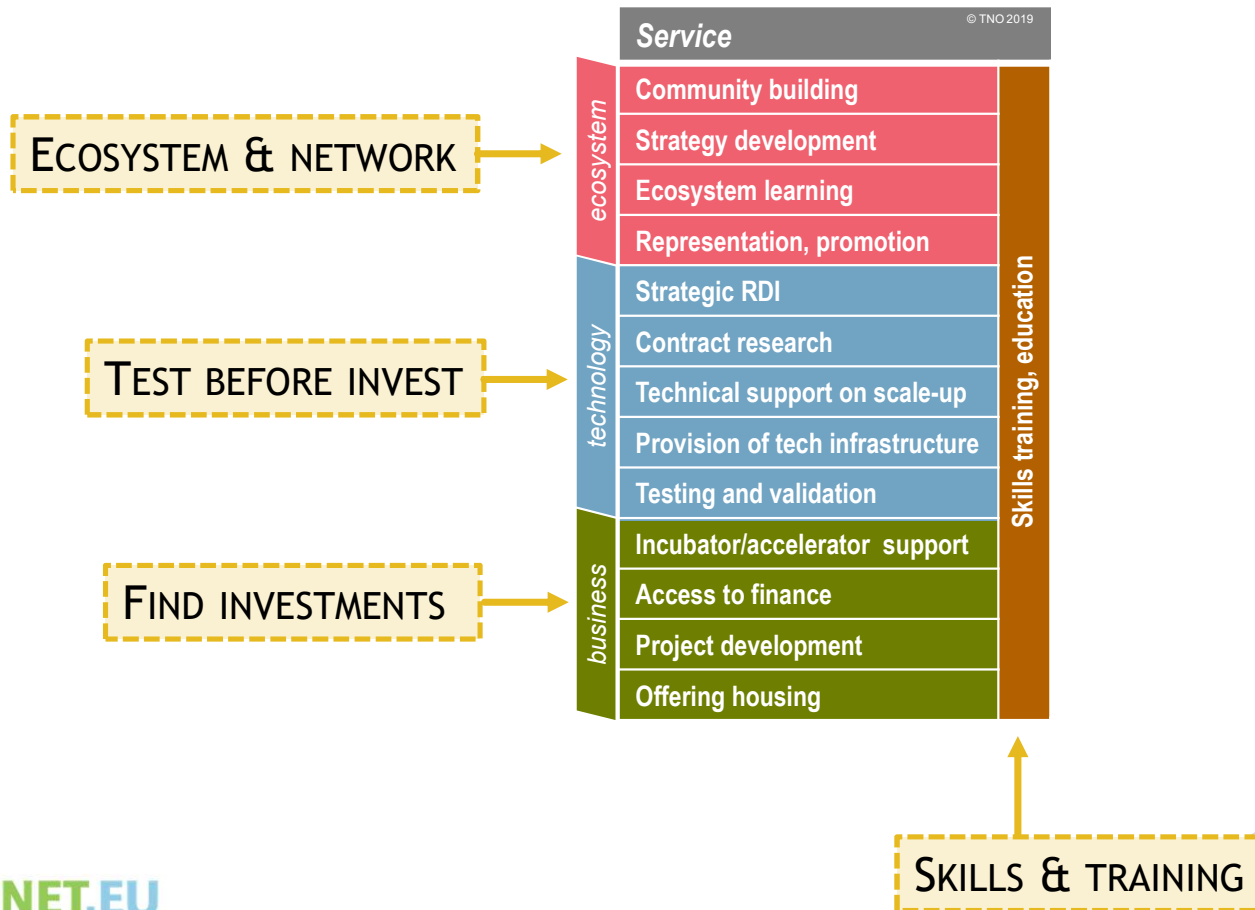
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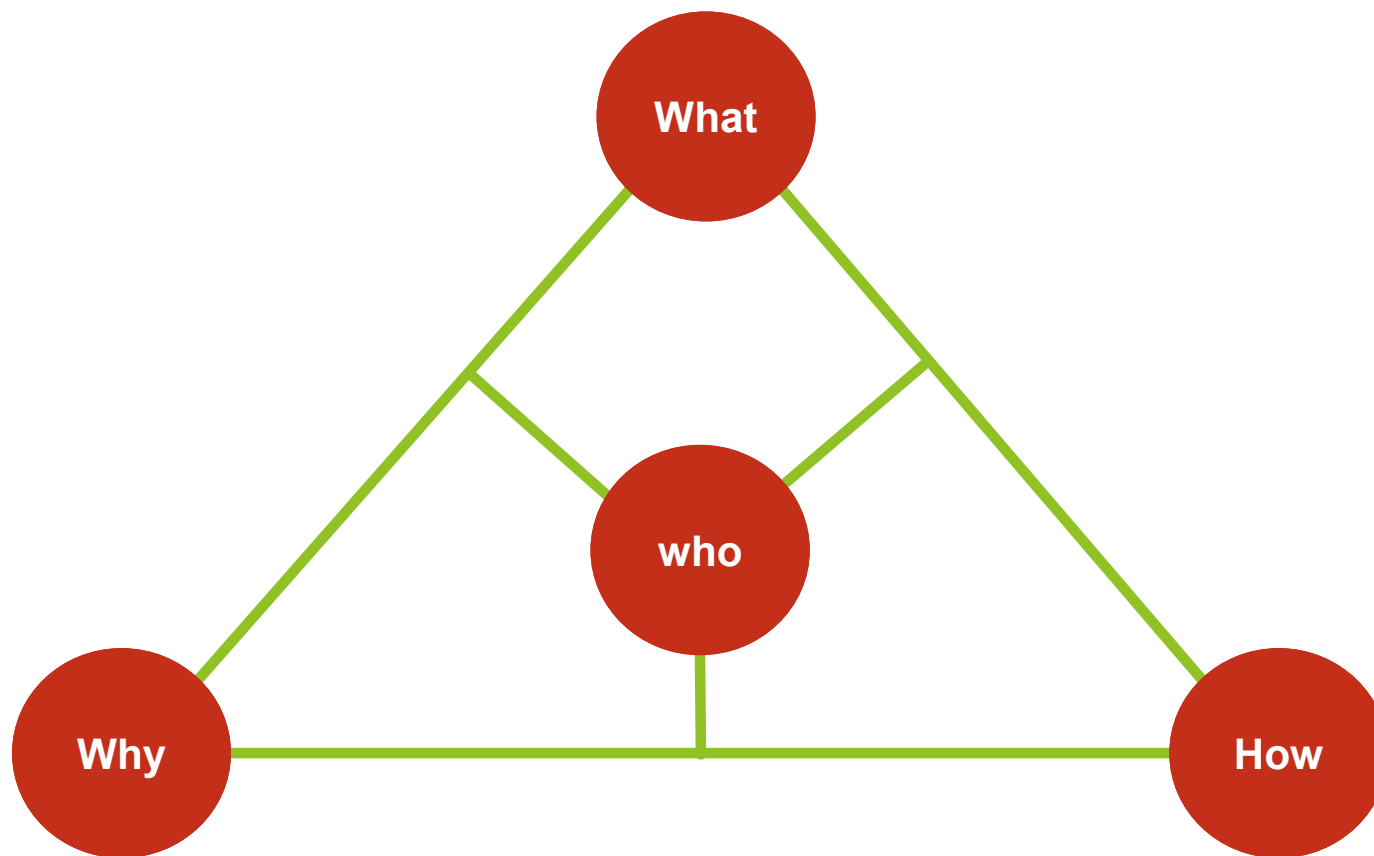
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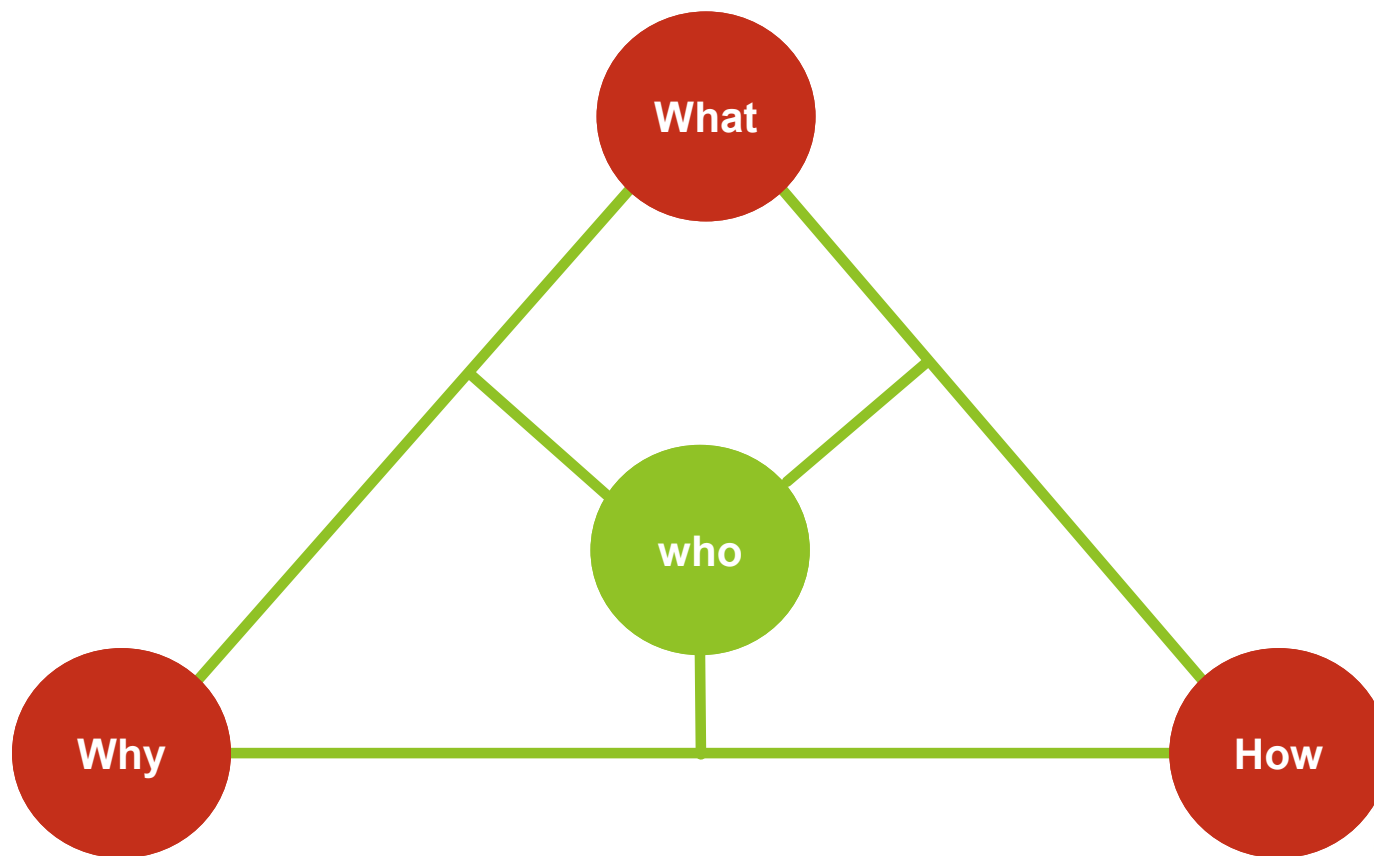
What: Take the activities of a DIH



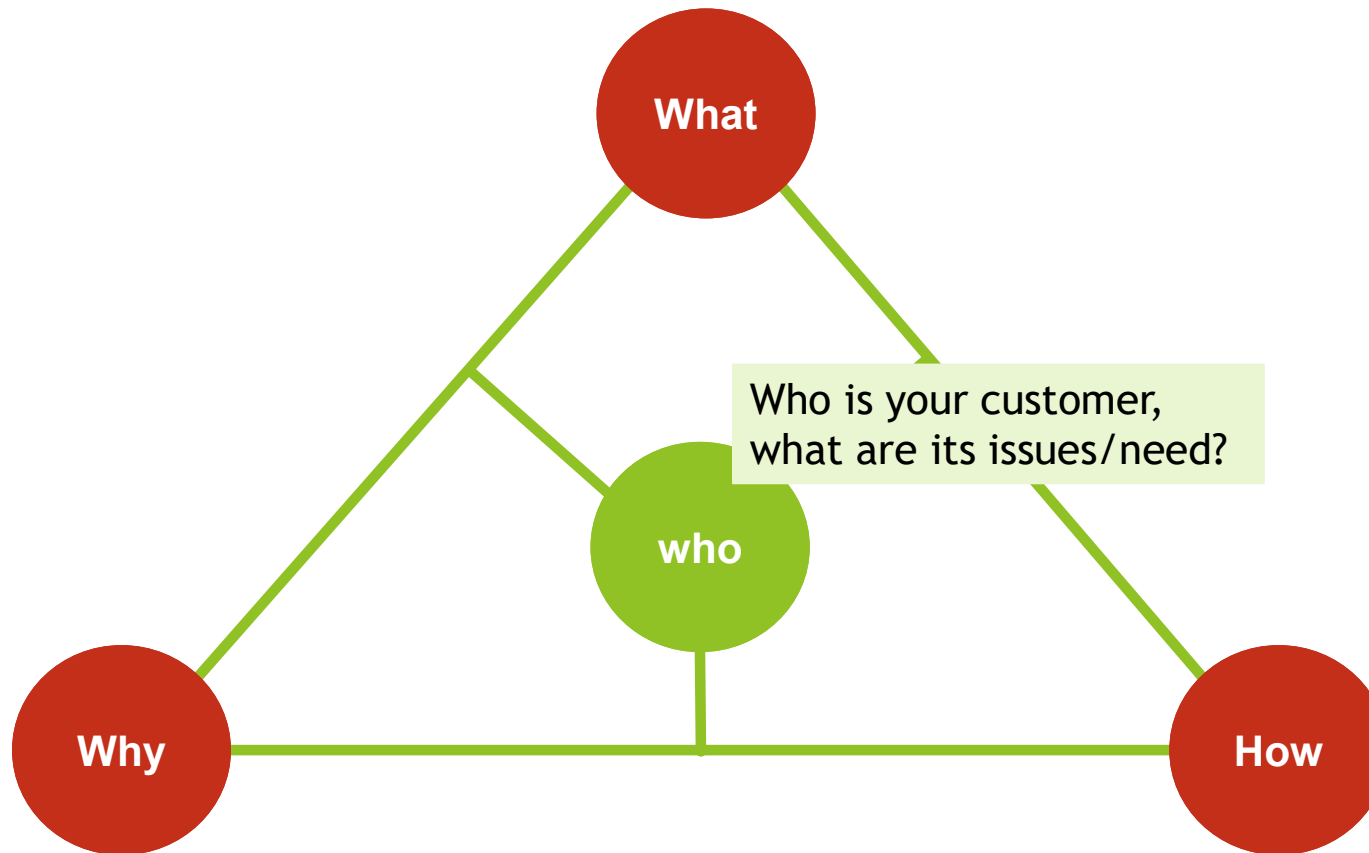
Business model for research infrastructures



Business model for research infrastructures



Business model for research infrastructures



INDUSTRY: INTEREST

Large companies

| |
|--------------------------------------|
| <i>Community building</i> |
| <i>Strategy development</i> |
| <i>Ecosystem learning</i> |
| <i>Representation, promotion</i> |
| <i>Strategic RDI</i> |
| <i>Contract research</i> |
| <i>Technical support on scale-up</i> |
| <i>Provision of technology infra</i> |
| <i>Testing and validation</i> |
| <i>Incubator/accelerator support</i> |
| <i>Access to finance</i> |
| <i>Skills and education</i> |
| <i>Project development</i> |
| <i>Offering housing</i> |

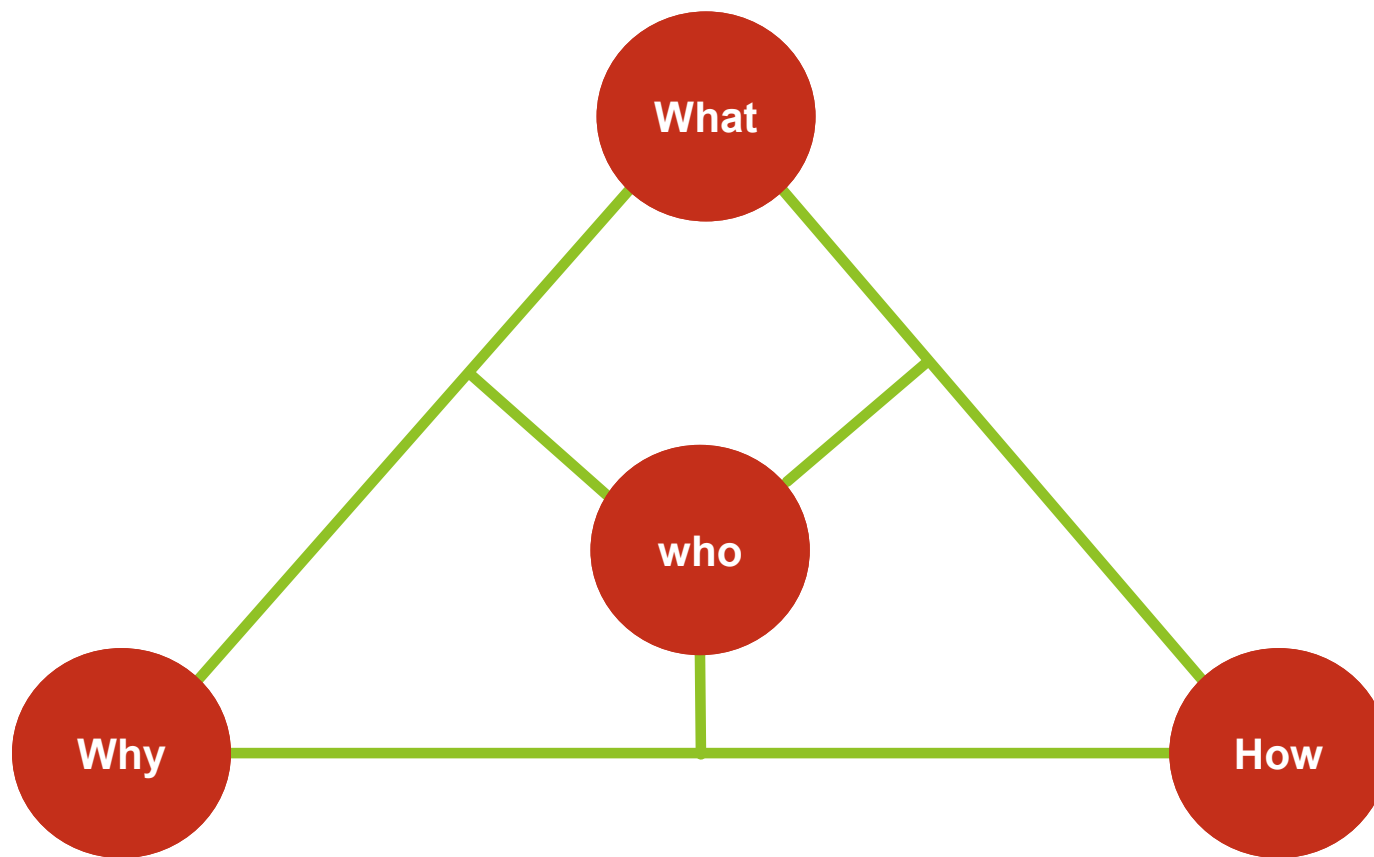
SMEs

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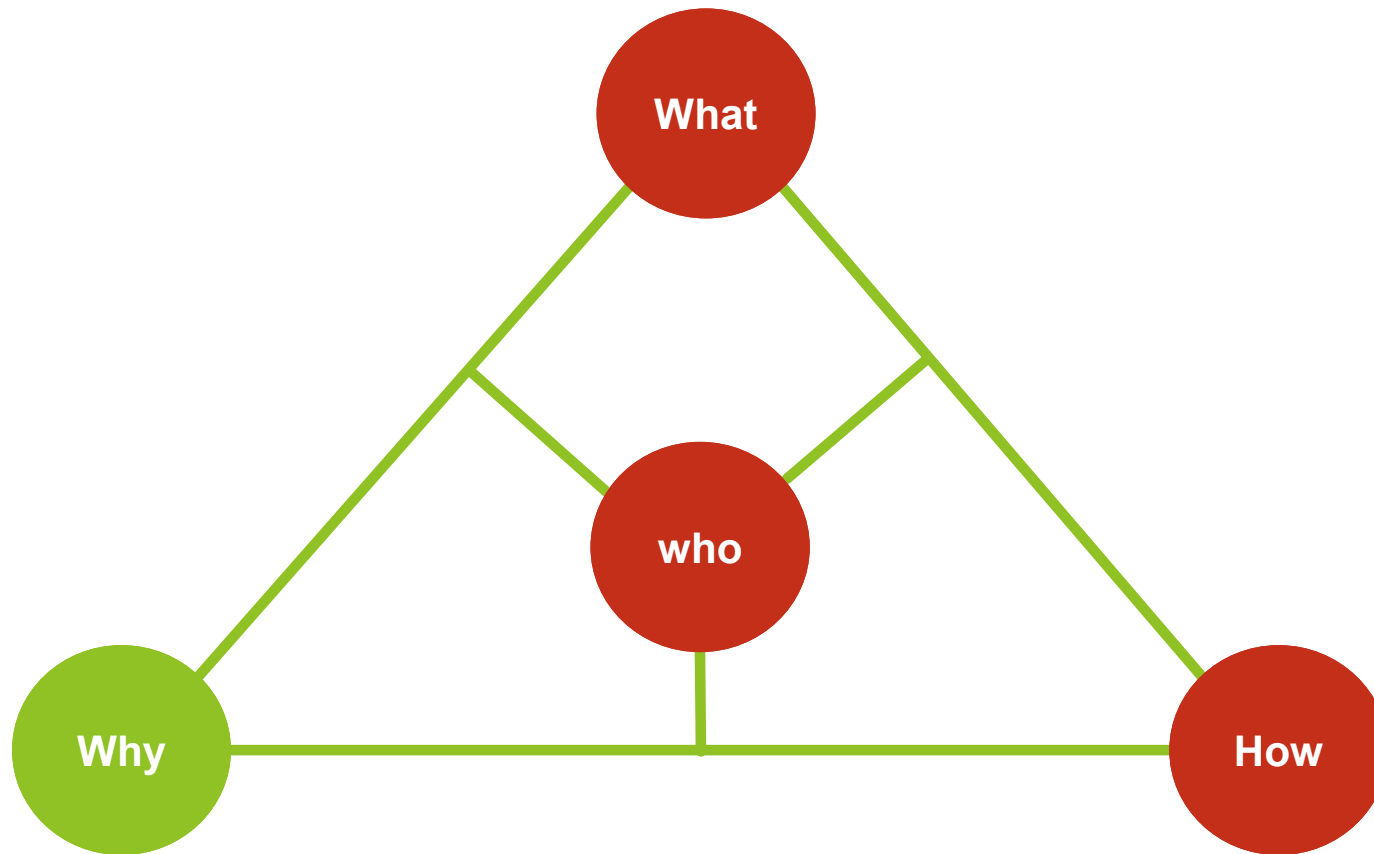
Start ups

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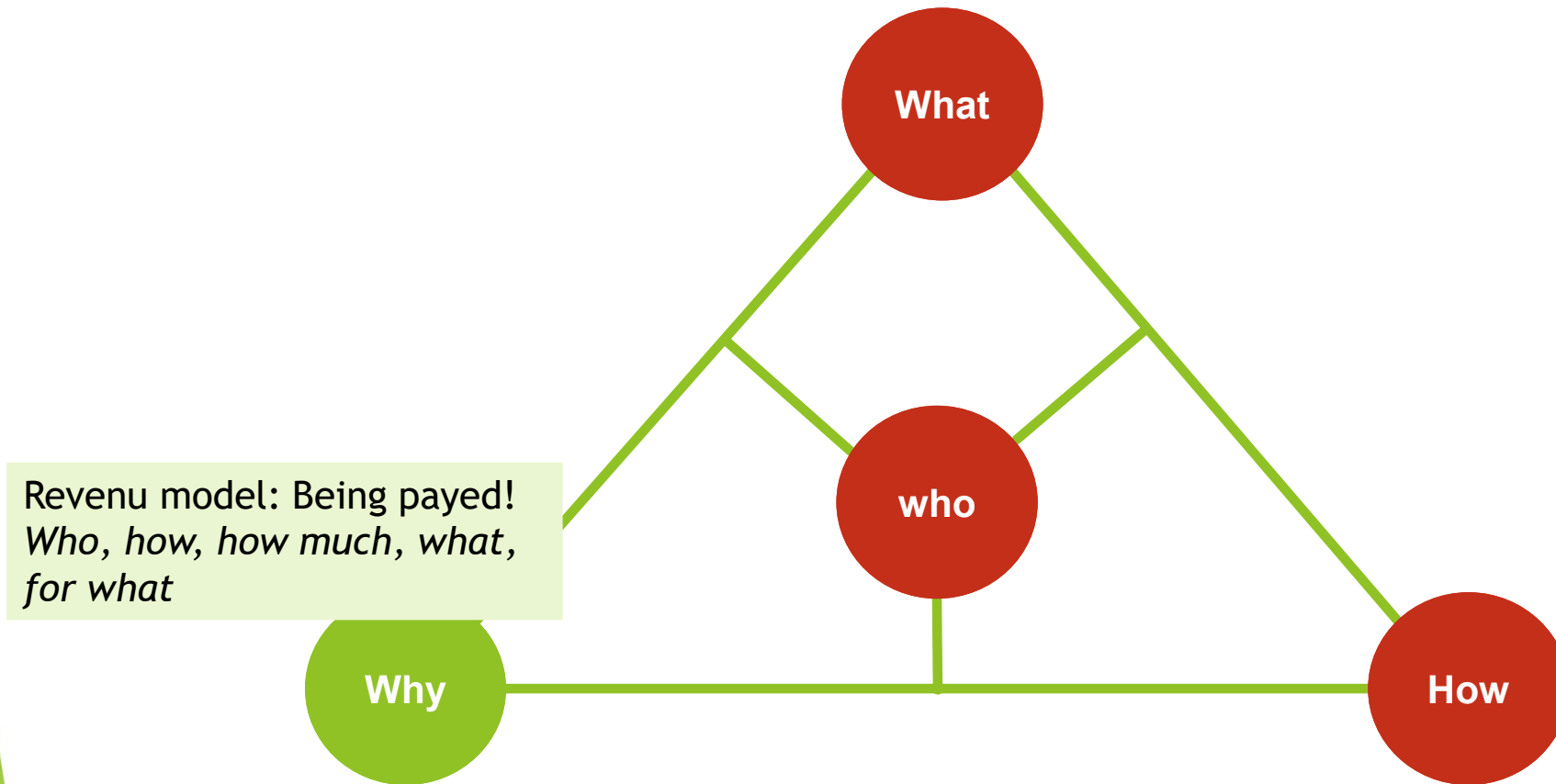
Business model for research infrastructures



Business model for research infrastructures



Business model for research infrastructures



INDUSTRY: WILLINGN € € SS TO PAY

Large companies

| | |
|-------------------------------|----|
| Community building | |
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| Ecosystem learning | |
| Representation, promotion | |
| Strategic RDI | € |
| Contract research | €€ |
| Technical support on scale-up | €€ |
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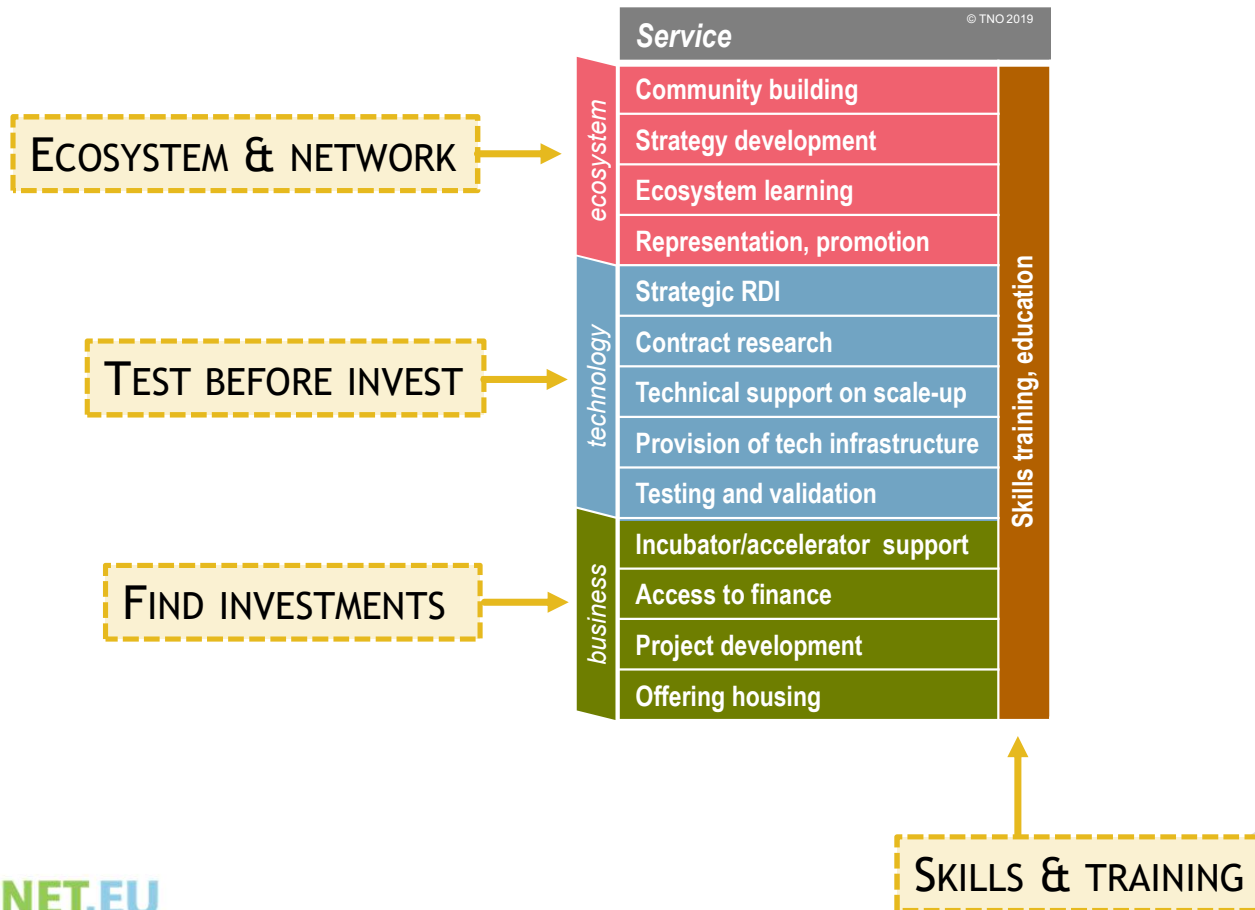
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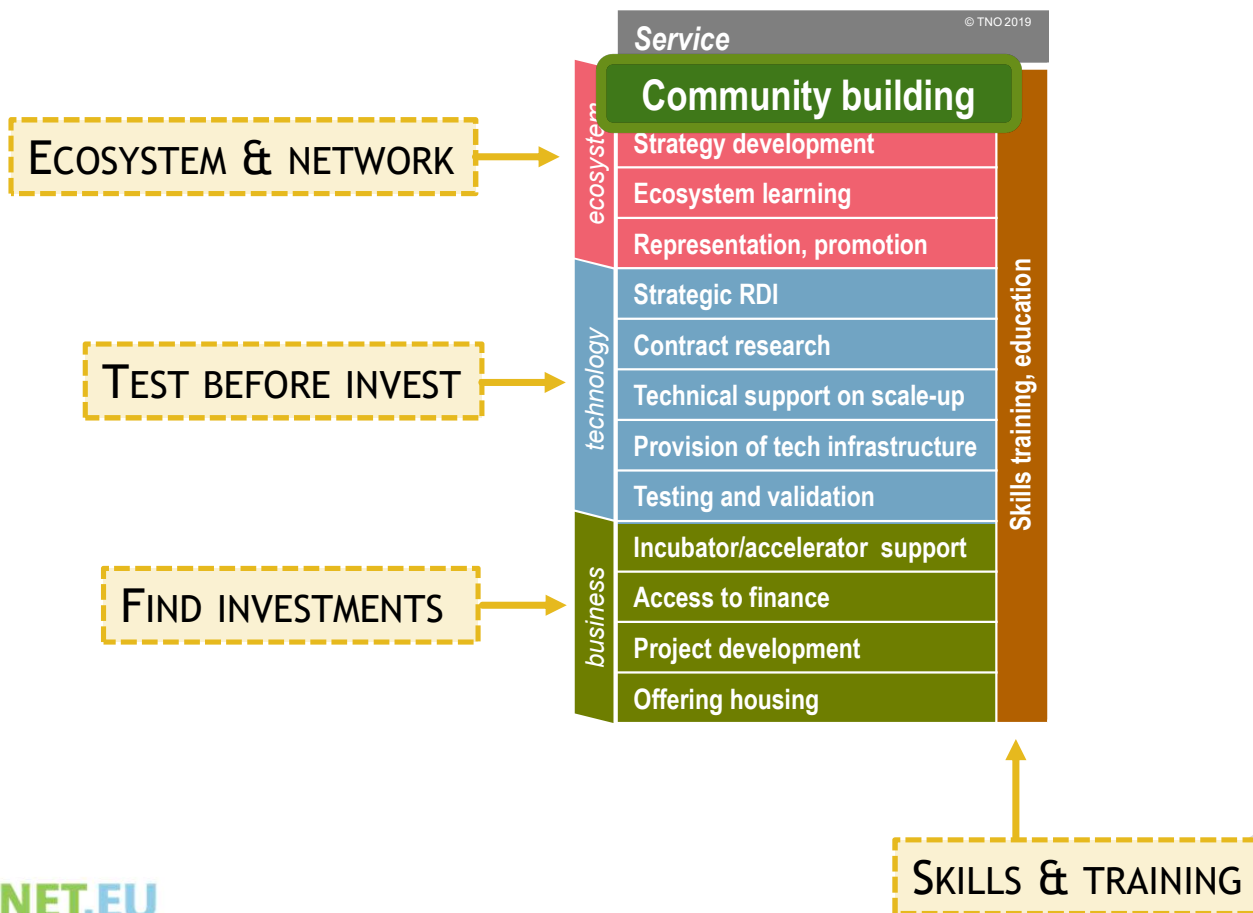
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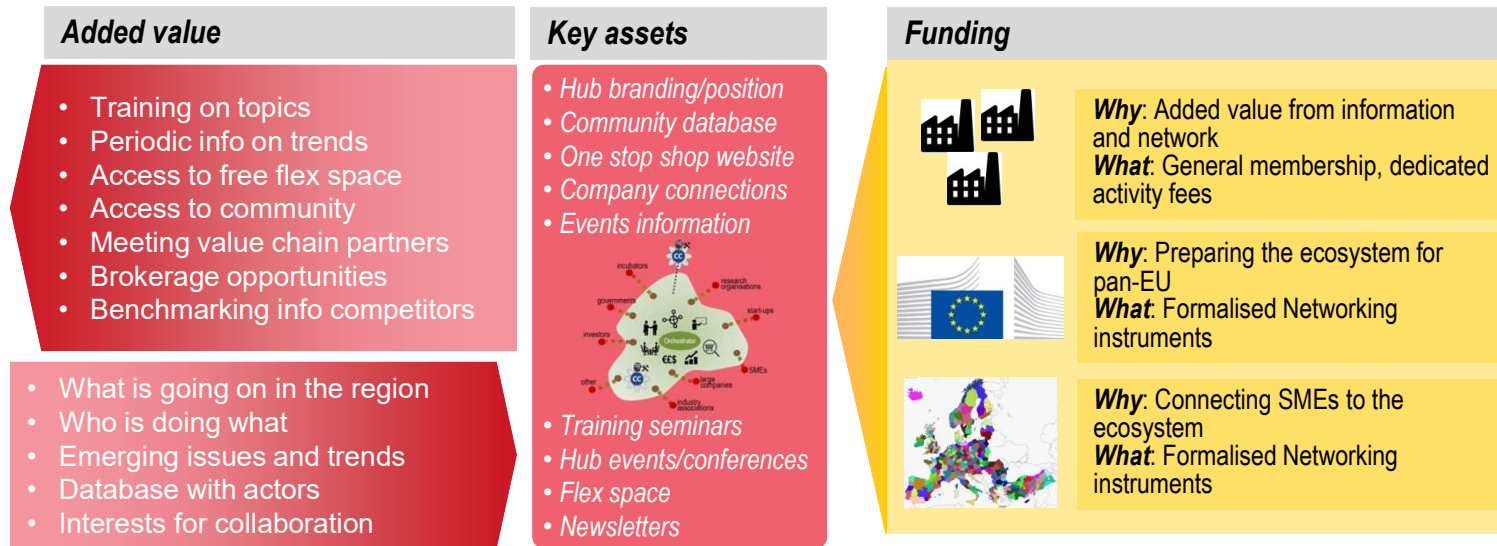
To summarize



To summarize



The business logic on community building



Community awareness
New projects
Access to business expertise
Access to infrastructures/technologies

Successful projects
New technologies developed

4 business models for community building



Option 1: Tier 3 membership

Core: An annual fee to get access to some general information and events.

Product: Newsletters, events, flexible working space, Q&A, community app

Pros:

- Low threshold for participation
- Can be easily combined with other activities

Cons:

- Limited added value
- Large community required
- Requires additional funding

Option 2: Add-on

Core:

On request, perform specific services fully paid for specific customers (standardized approaches needed).

Product: Matchmaking, individual network advises, in-app purchases

Pros:

- High added value

Cons:

- High costs can be a threshold for purchase
- Track record is crucial

Option 3: Advertisement on website (affiliation)

Core: Using the strong name to link to other website on a commercial basis

Product: Linking as an advertisement mechanisms (Google)

Pros:

- Limited costs

Cons:

- Potential damage to the independent image

Option 4: Sponsorship

Core: Additional income by allowing sponsors to attach themselves to the deliverables and events

Product: Incorporating logo of third parties

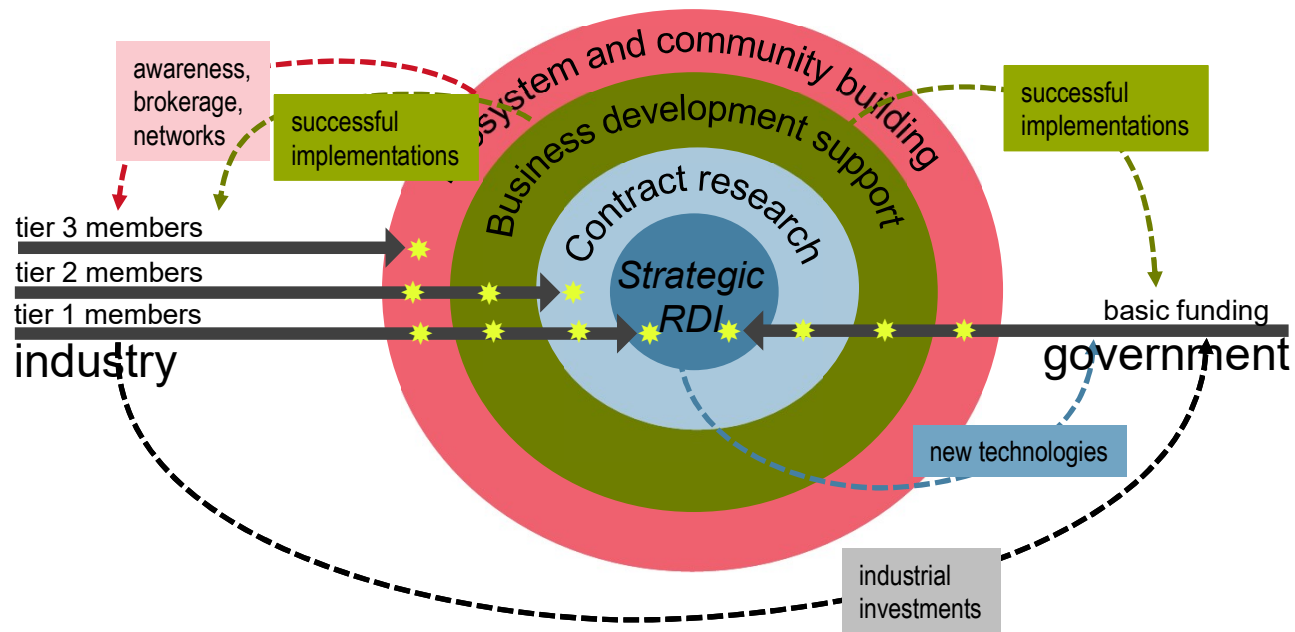
Pros:

- Easily achievable
- Improving the strength of the hub

Cons:

- Dilution of the independent image
- Added costs to materials

Key: a multi-layered business model

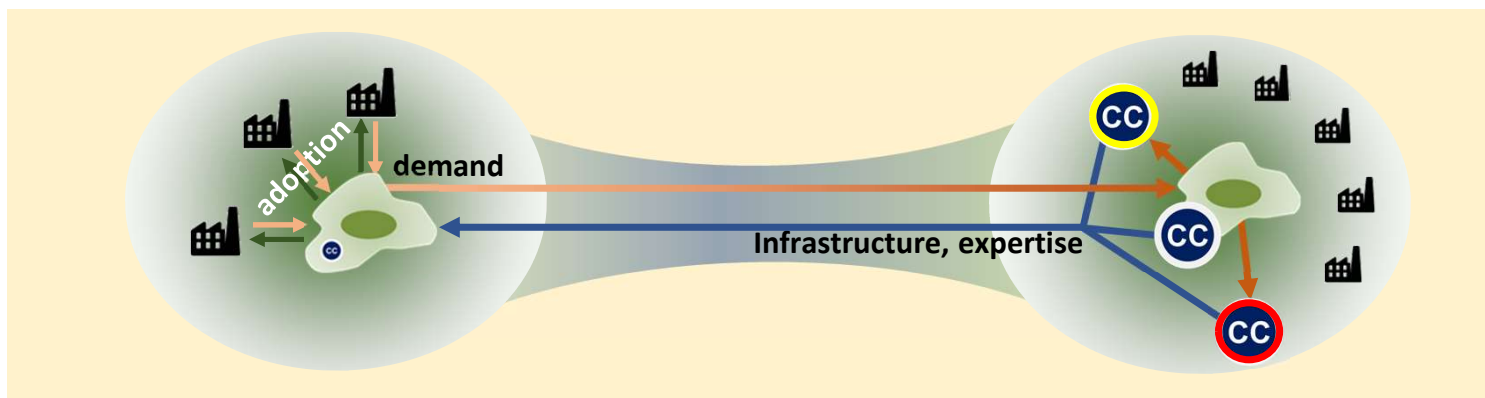


Some observations from my side

- ▶ Embed your research infrastructure in the ecosystem, linking technology services to business and ecosystem services
- ▶ Multiple interlinked business models are needed to ensure economic sustainability
- ▶ As a research infrastructure is addressing “market failures”, public support is needed. But commercial activities are also important
- ▶ Successful infrastructures are strong on industry involvement, but there is a downside
- ▶ A research infrastructure should use large enterprise support to build a foundation, but should have SMEs in their mission

Epiloge: Business models for interregional collaboration

This is about creating corridors



Business models for EU collaboration

- ▶ EU-collaboration is key to ensure the competitive advantage of the regions
 - ▶ Action: Aligned expenditures and reduction of overlap
 - ▶ Impact: More budget for higher expertise in specific areas
- ▶ Creating economic sustainable interregional collaboration is difficult:
 - ▶ The return on investment to engage in EU-collaboration is too low for individual RIs
 - ▶ Regional collaborations/coordination can create economy of scale, increasing ROI
- ▶ New business models are needed to make EU-collaborations profitable
 - ▶ Brokerage fees;
 - ▶ Pan-EU cluster projects
 - ▶ Satellite model for research development

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 - ▶ Action: Aligned expenditures and reduction of overlap
 - ▶ Impact: More budget for higher expertise in specific areas
- ▶ Creating economic value
 - ▶ The return on investment
 - ▶ Regional collaboration
- ▶ New business models are needed to make EU-collaborations profitable
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The European Digital Innovation Hubs

Result:
Individual RIs
Increasing ROI

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Thank you!
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E-mail: maurits.butter@tno.nl

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