



**Innovation Center for
Artificial Intelligence**

ICAI Amsterdam



ICAI – Why?

- Research and innovation in AI key enabling technology are a must **to stay relevant**
- Help grow **AI ecosystems** in Amsterdam and around the country
- Attracting, retaining and training of **talent**
- Do **great science** with **great impact**



Mission

- The National Innovation Center for Artificial Intelligence (ICAI) has the mission to **keep** the Netherlands at the **forefront** of **knowledge** and **talent** development in AI.
- Creating and nurturing a **national and regional** AI knowledge and talent **ecosystem**.



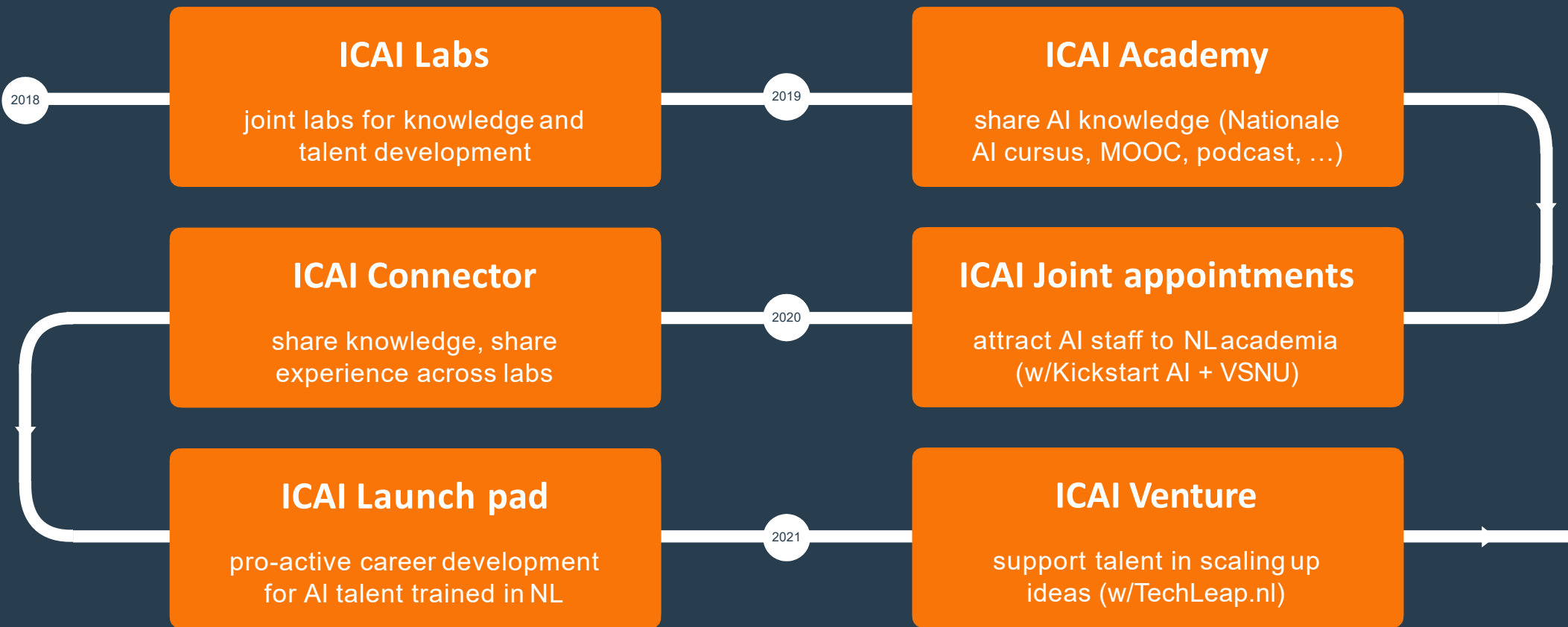
AI Innovation Ecosystem



Innovation Center for
Artificial Intelligence



ICAI building blocks



Foundational building block: ICAI Labs

- **Collaboration** knowledge institute(s) with private or public party(ies)
- Shared **fundamental AI Technology research** agenda determined together
- At least **5 PhD students**, a lab manager, and scientific director(s)
 - Plus custom made possibilities (postdocs, external PhDs, etc.)
- Five year collaboration based on open **knowledge development**
- **Strong external focus**
 - PhD students work part of their time at the location of the partner
 - Knowledge transfer based on the needs (e.g., meetups, internships)
- **IP arranged** per lab with the involved knowledge institutes

ICAI – Where?

- A **national federation** of AI research labs
- **One** ICAI head office
 - Science Park Amsterdam
- **8** ICAI locations, **29** labs, **180+** researchers
 - Amsterdam (UvA, VU), Den Bosch, Delft, Eindhoven, Nijmegen, Tilburg, Utrecht, Wageningen



Requirements for a Lab

•Company

- Ability to absorb AI knowledge
- High skilled people
- Data pipeline

•University

- World-class research
- Proven track record in publications and critical mass on AI research
- Broad experience in talent development and tech transfer

•Ecosystem

- Being part and supporting the local and national ecosystem(s) on talent & innovation

Benefits for organization

Being part of the **academic ecosystem**

- **Connect** with knowledge institutes and have direct access to, and work with talent (PhD, prof, students)
- **Show** AI strength and appeal as a company
In research (publishing papers)
- **Presence** in the AI education and research ecosystem



Benefits for organizations

Need for scientific progress

- Speed up the **knowledge development** internally
- Long term combined with short term **strategy**
- Focus on the research to stay **competitive**



Benefits for organizations

Capturing the state-of-the-art knowledge

- **Integrate** newest knowledge
- **Experiments** and demos on internal data
- Have the right to buy **IP**
- Be(come) **independent** from external suppliers (e.g. consultants)



Organizational structure of a lab

- Clear **governance** structure
- Quarterly **reports**
- Milestones **checked** bi-annually throughout the collaboration
- Strategic **involvement** of the company(s) in the lab

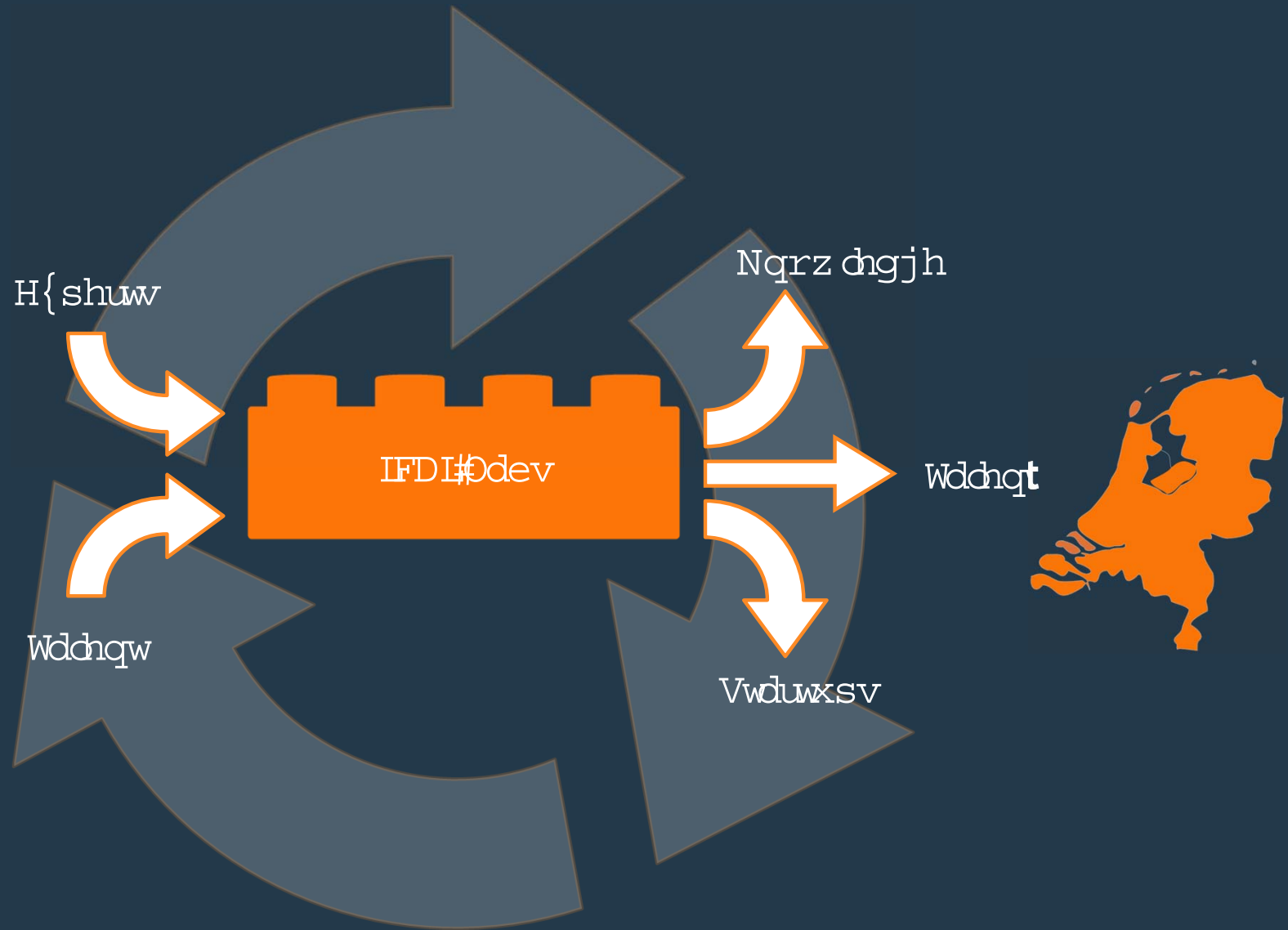
Governance of a lab

Daily practice

- Scientific **director**(s) – full professor(s)/assoc. professor(s)
- Scientific **manager** – assistant professor
- PhD **students** – in close collaboration with industrial partner

Governing Board

- One **representative** from each partner
- **Evaluation** the progress of the program and assesses
- Meets **twice** a year



ICAI Activities:

- **ICAI Labs:** shared research development in Labs
- **ICAI Experts:** Programme to attract AI-staff
- **ICAI Connector:** share knowledge and experience
- **ICAI Venture:** support talent in scaling up ideas, together with TechLeap.nl
- **ICAI Academy:** broad development of AI knowledge in industry
- **ICAI Launch pad:** pro-active support in careers of AI talent



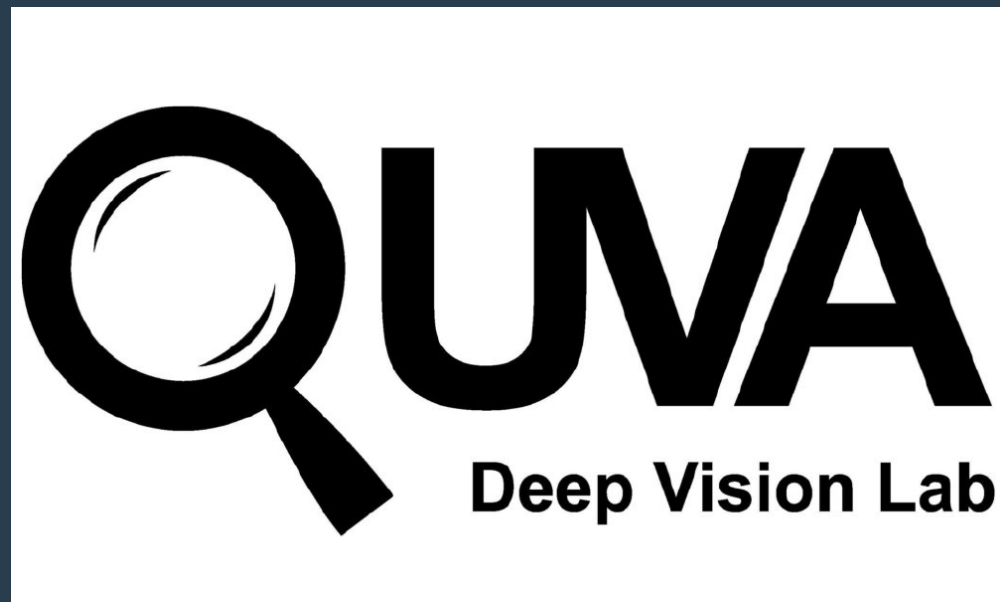


**Innovation Center for
Artificial Intelligence**

The Amsterdam Labs



High-tech: QUVA lab



UvA and Qualcomm

High Tech: Delta Lab



UvA and Bosch

High-Tech: Atlas Lab

TomTom 



UNIVERSITY
OF AMSTERDAM

UvA and TomTom

AI and Health: AI for Medical Imaging Lab



AI and Health: AI for oncology Lab



AI and Health: Pop AART lab



UvA, NKI and Elekta

Citizens and ELSA: Civic AI lab



Citizens and ELSA: Cultural AI lab



CWI, KNAW, KB, the Rijksmuseum, the Netherlands Institute for Sound and Vision, TNO, VU and UvA

Safety and Security: Police Lab AI

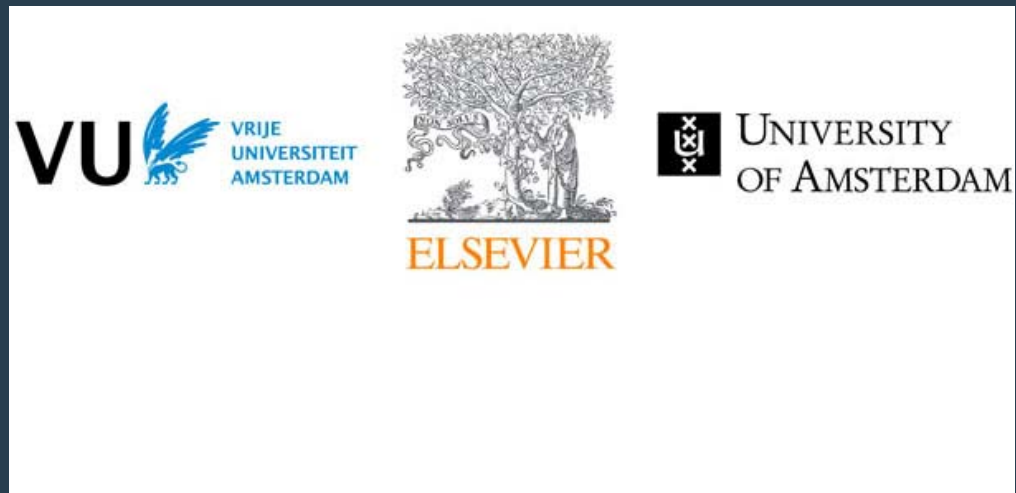


Platform Economy: AI for retail Lab



UvA and Ahold-Delhaize

Platform Economy: Discovery lab



VU, UvA and Elsevier

Platform Economy: Mercury Lab



Mercury
machine learning lab

UvA, TUDelft and Booking.com