

Journey through the Valley of Death
From idea to investment

Témavázlat

Innovációs ökoszisztéma

A technológia transzfer folyamata

Kulcsfogalmak

Vállalkozói lét

A vállalkozásod meghatározása

A vállalkozás finanszírozása

Skálázás

Az egyetemi inkubátor szerepe

 Üzleti modell – BMC

 BMC validálás

 Befektetés

A startup finanszírozás ma

Topics for discussion

Commercial side of tech transfer

How an invention crosses the valley of death

The role of university incubators

The path from idea to investment – AQDOT

- The Business Model

- BM validation

- Investment

Launching your startup

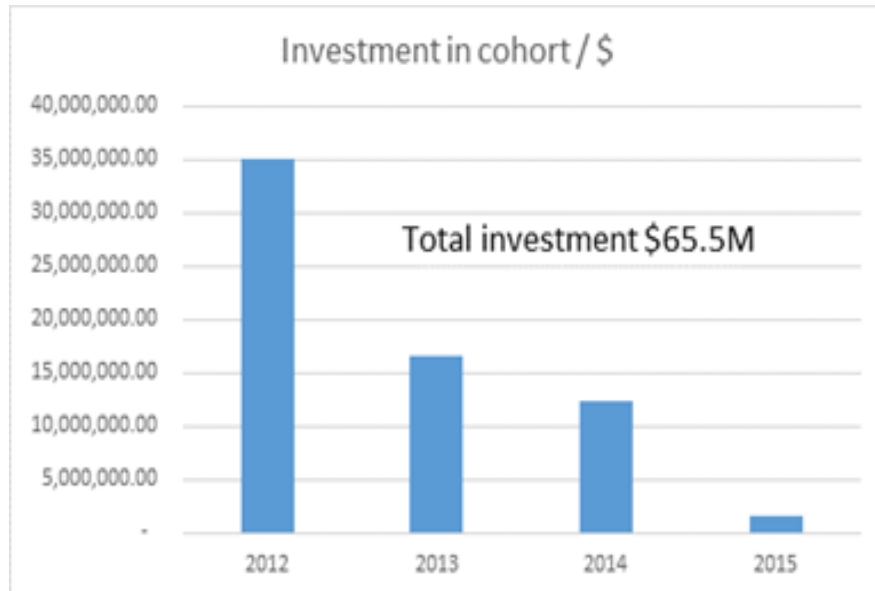
Venture capital 101

Key achievements

Accelerated 66 startups since 2011
27 graduated from programme
Cumulative investment in startups
\$65.5 million



Imperial College
London
Incubator



Changing pathways to innovation

Transformation of the industrial context of innovation in past decades

Universities

Widened brief from R+E focus to translation of research into innovation

Large tech companies

No positive returns from R&D

Struggle to retain role as leading innovators

Slow to keep up with changing markets

Lack agility to drive disruptive technological change

Increasingly outsource parts of their R&D

Acquire specialist technology companies

Reduce spending on internal fundamental research

Small tech companies

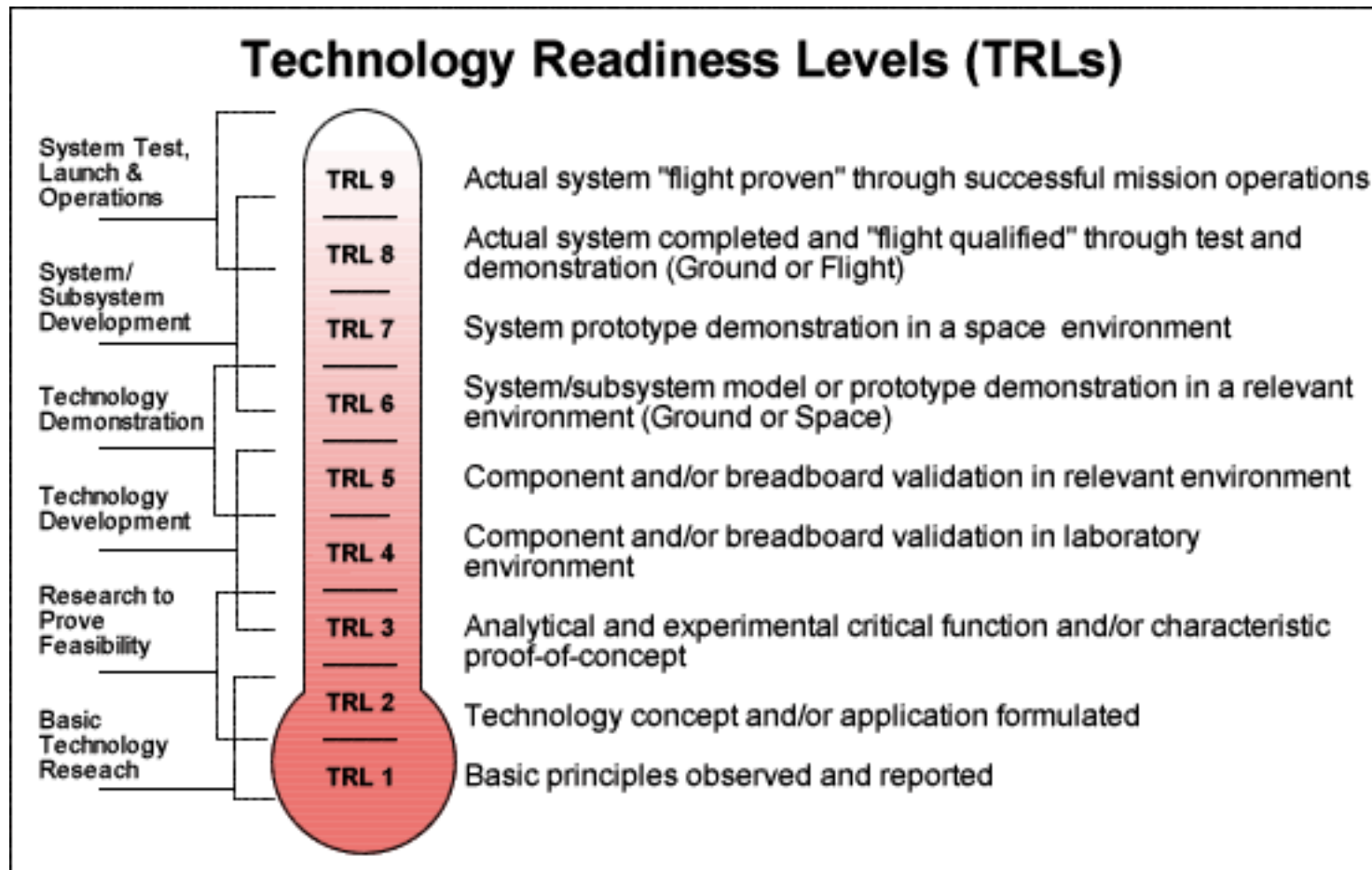
Taken the lead in driving transformational change

Success dependent on universities and large corporates

Key terms

- TRL
- Valley of death
- Startup/spinoff
- Incubator/Acceleration
- Business model (not business plan)
- Life cycle of a venture
- Hype cycle

Technology readiness levels (TRL) a method of estimating technology maturity of Critical Technology Elements (CTE) of a program during the acquisition process. TRL are based on a scale from 1 to 9 with 9 being the most mature technology. The use of TRLs enables consistent, uniform discussions of technical maturity across different types of technology. Source: European Association of Research and Technology Organisations (EARTO)

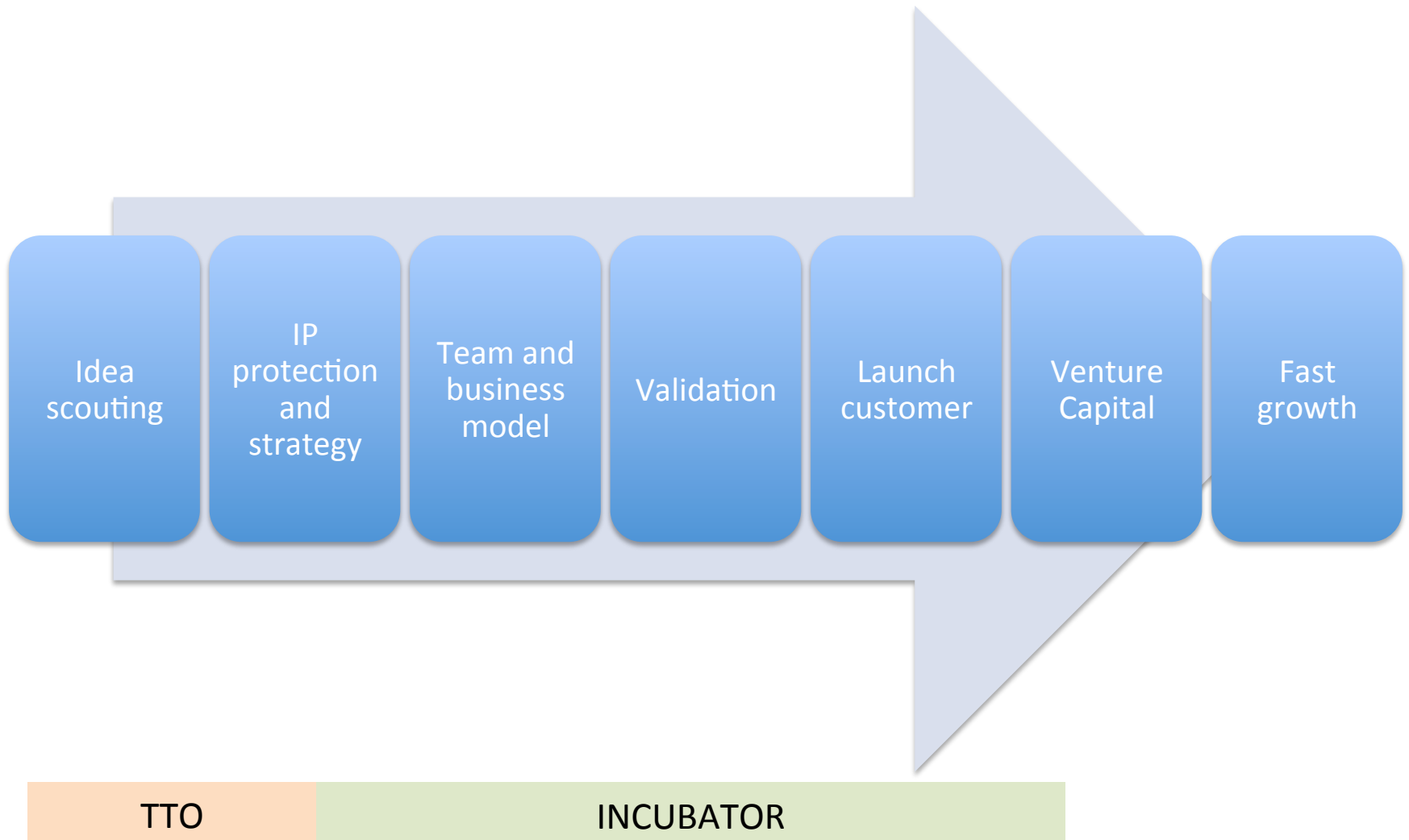


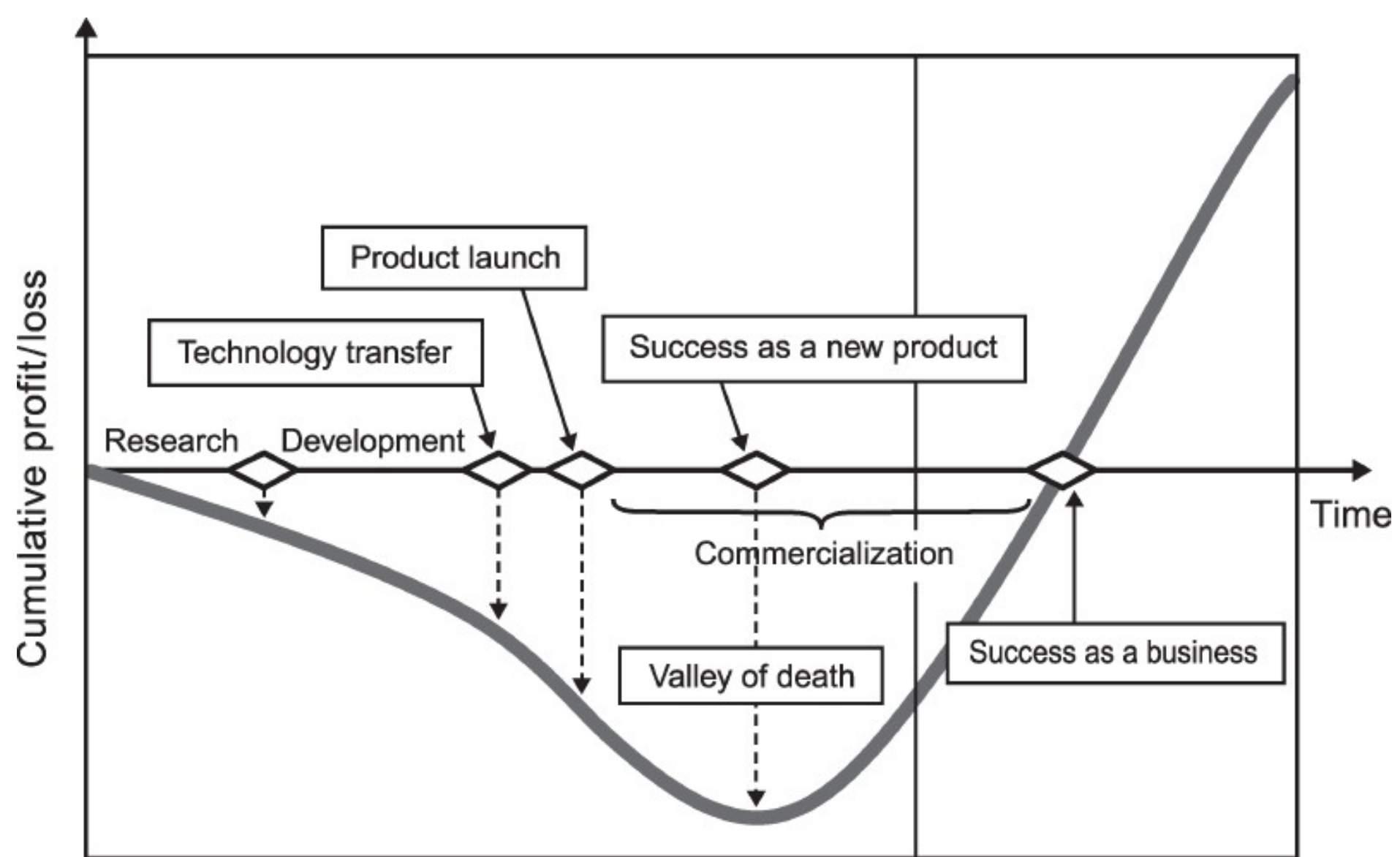
TRL in EU

Technology Readiness Level Description

- TRL 1. basic principles observed
- TRL 2. technology concept formulated
- TRL 3. experimental proof of concept
- TRL 4. technology validated in lab
- TRL 5. technology validated in relevant environment
- TRL 6. technology demonstrated in relevant environment
- TRL 7. system prototype demonstration in operational environment
- TRL 8. system complete and qualified
- TRL 9. actual system proven in operational environment

R&D Commercialisation chain





View of the valley from Osawa and Miyazaki

Valley of death

Few companies that enter ever emerge

Three character traits all survivors share are

Determination

Focus

Fiscal restraint



Incubator - Acceleration

An incubator is a company that helps new and startup companies to develop by providing services such as management training or office space

- Helps ideas grow from early stage (R&D) to maturity
- Funds vs. investment
- Training (skills, team, strategies, pitch)
- Services

Accelerator

- Enterprise development programme
- Shorten time to market
- Stages and gates

Incubator services

Help with business basics

Networking activities

Marketing assistance

Market Research

High-speed Internet access

Help with accounting/financial management

Access to bank loans, loan funds and guarantee programs

Help with presentation skills

Links to higher education resources

Links to strategic partners

Access to angel investors or venture capital

Comprehensive business training programs

Advisory boards and mentors

Management team identification

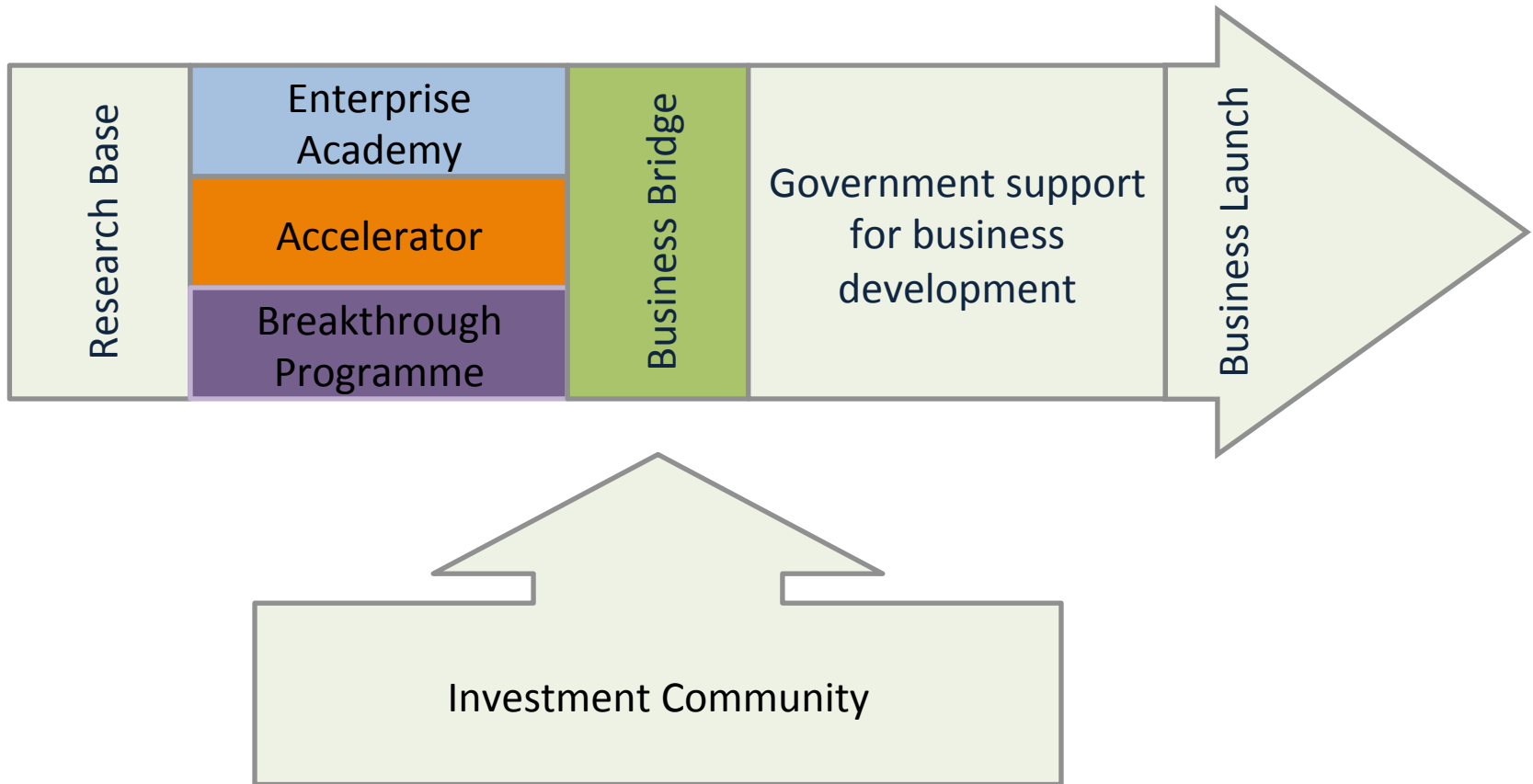
Help with business etiquette

Technology commercialization assistance

Help with regulatory compliance

Intellectual property management

Incubator design



Professional Ideation

- Support both challenge led and push innovation ideas through professional ideation approaches.
- Bring together all partner categories and integrate across ecosystem. Incubator to lead on this.

Elements of Acceleration

- The three stage accelerator approach and start-up support mechanisms are applied, where appropriate, to all early stage innovation and business creation activities.
 - Stage 1: business model development
 - Stage 2: customer discovery
 - Stage 3: team establishment

Innovation Translation Team

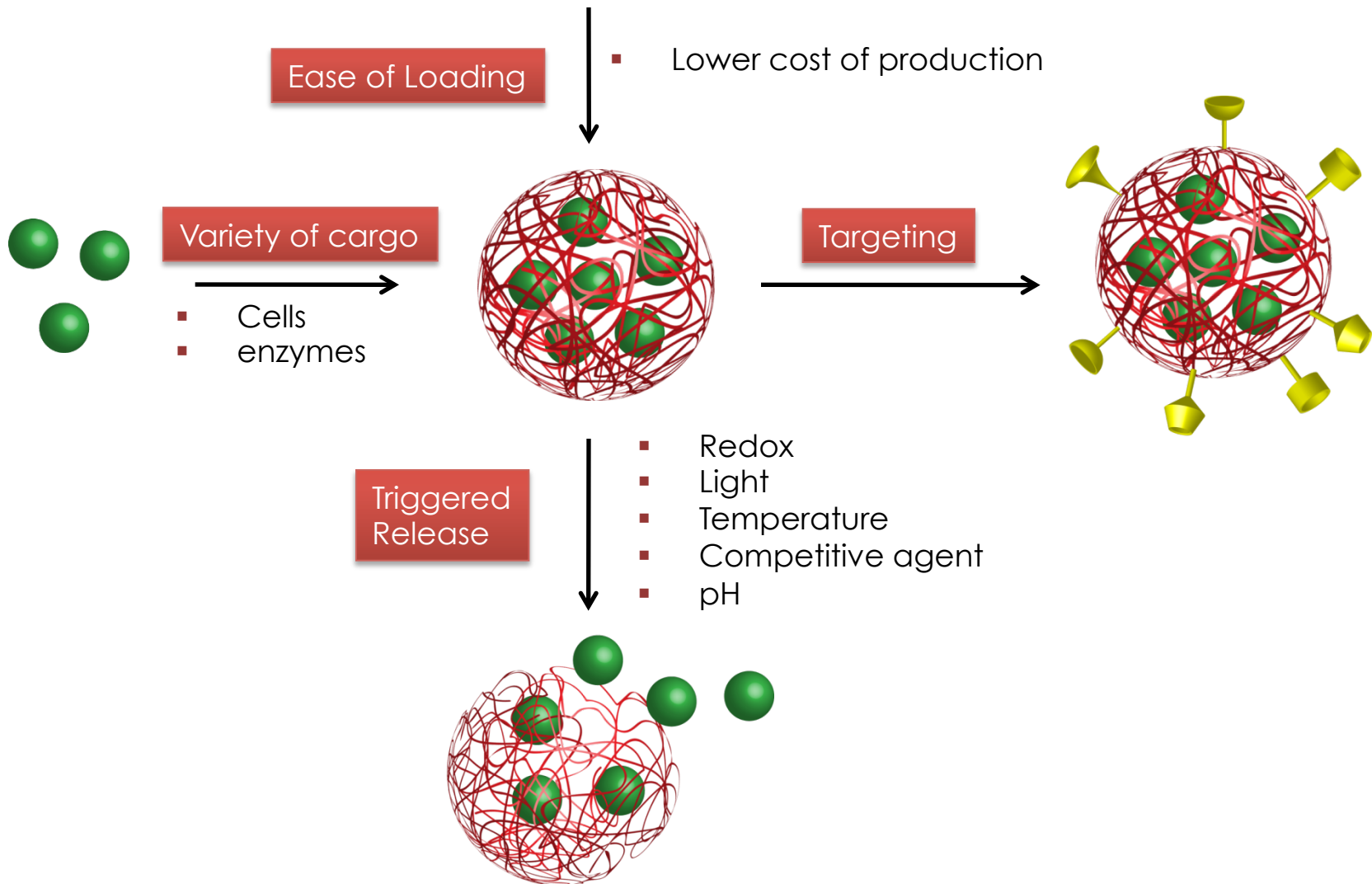
- A team that would typically include appropriate technical people and business acumen. They work with the inventor to translate the idea into a viable start-up
- Teams trained through Venture Academy, with continuing training and support whilst doing innovation translation

Climate-KIC Stage 3 Incubation Programme

aqdot



Platform Technology



Application Potential



Oil and Gas



Paints & Coatings



Paper



Textile



Adhesive, Sealants, & Lubricants



Food



Pharma and Medicine



Household Care



Agriculture



Personal Care

Industry Validation

aqdot

Climate-KIC added value

Links between UK start-up and enzyme industry giant
Novozymes

R&D Director confirms that aqdot's approach is novel and
potentially applicable to Novozymes enzyme systems
Application for funding of aqdot/Novozymes innovation
project submitted to Climate-KIC in 2014

novozymes®



Rethink Tomorrow

Startup

- Not a small sized company
- Does not execute a business plan
- A temporary organisation searching for a replicable and scalable business model

Spinoff

- a company founded on the findings of a member or by members of a research group at a university

Business model

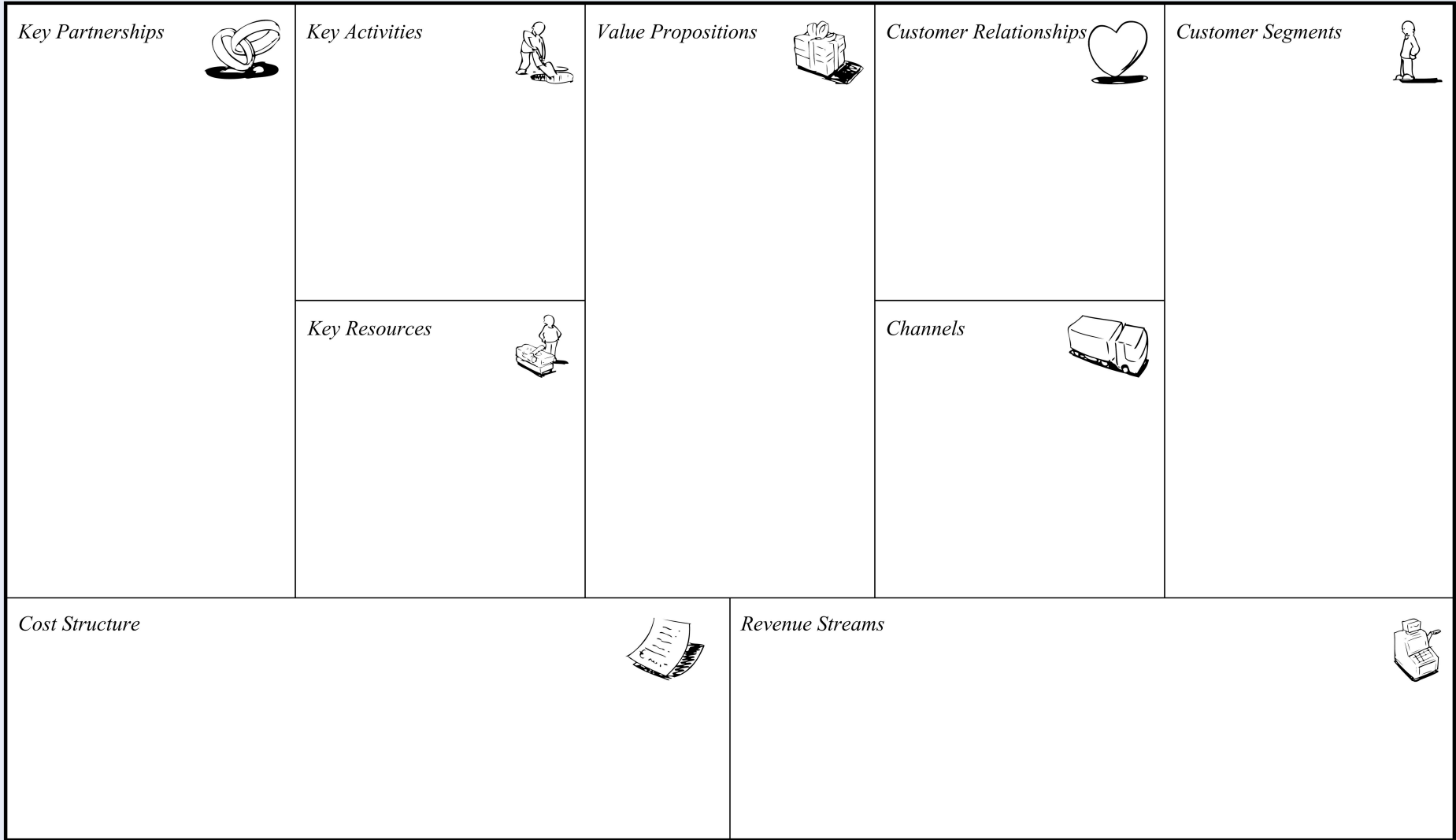
<https://www.youtube.com/watch?v=QoAOzMTLP5s>

The Business Model Canvas

Designed for: _____

Designed by: _____

On: Day _____ Month _____ Year _____
 Iteration: No. _____

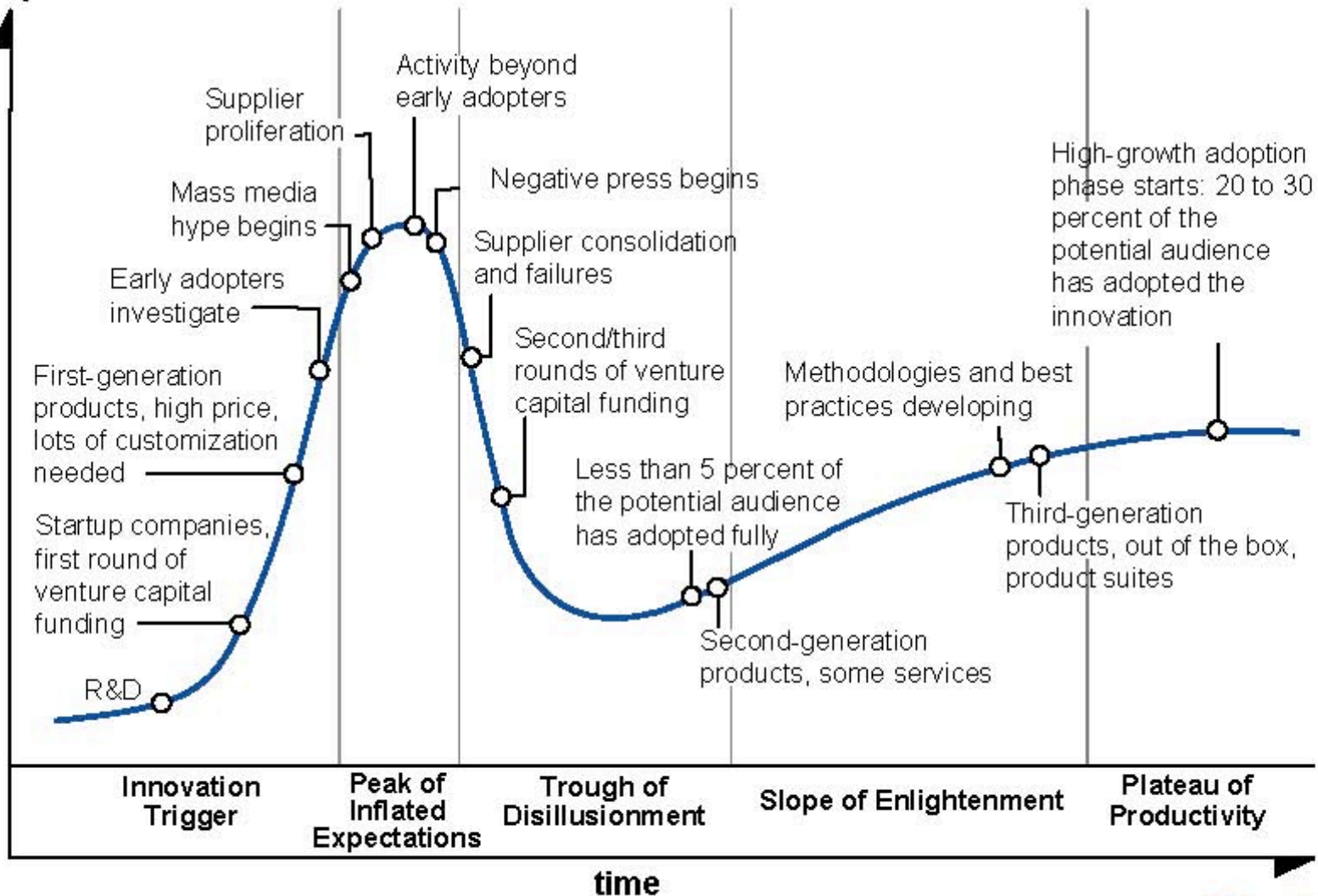


Startup launch

- Idea
- Team (vision, sales, fiscal restraint)
- Sweat equity
- BMC
- MVP vs prototype

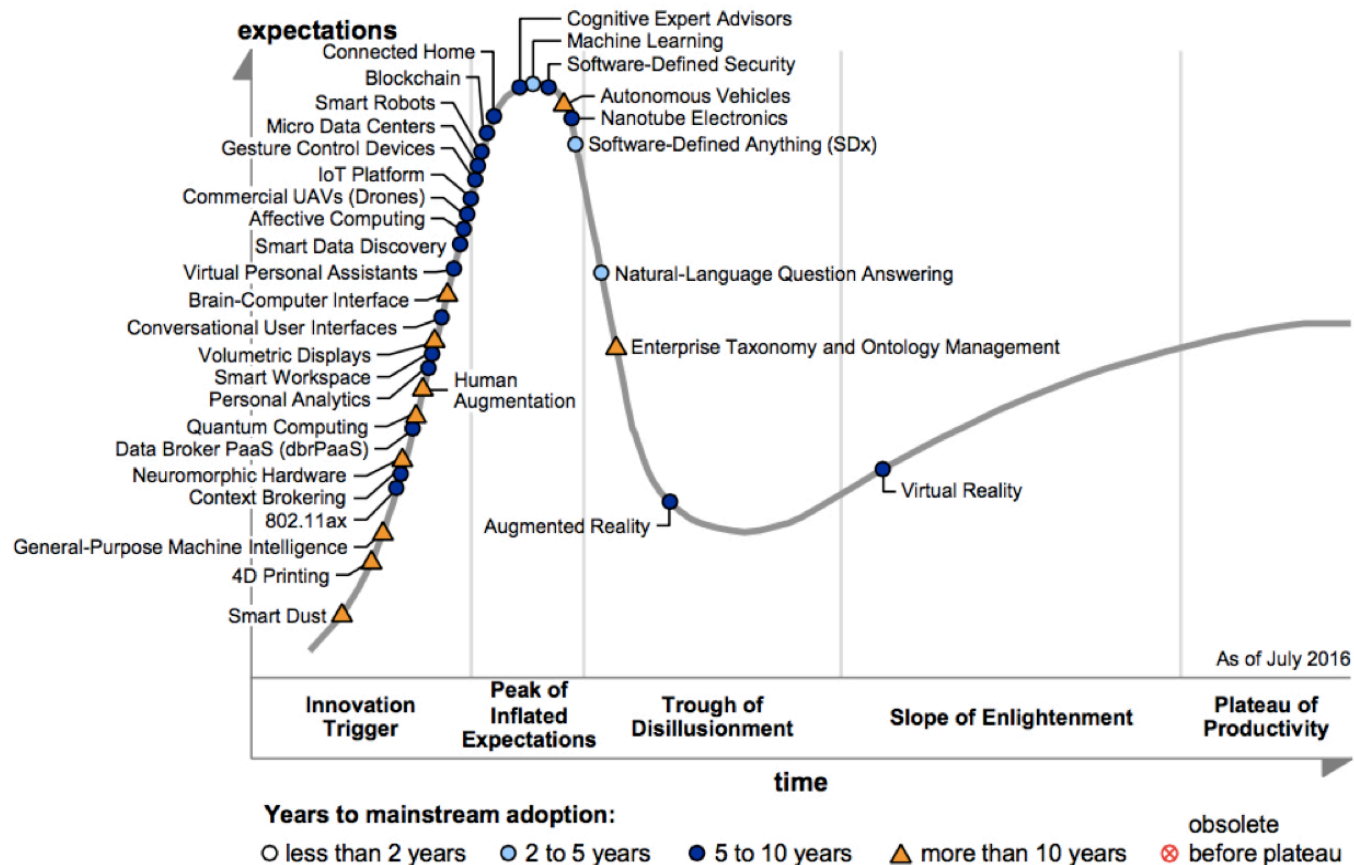
Hype Cycle Indicators

expectations



Gartner Hype Cycle

Figure 2. Hype Cycle for Emerging Technologies, 2016



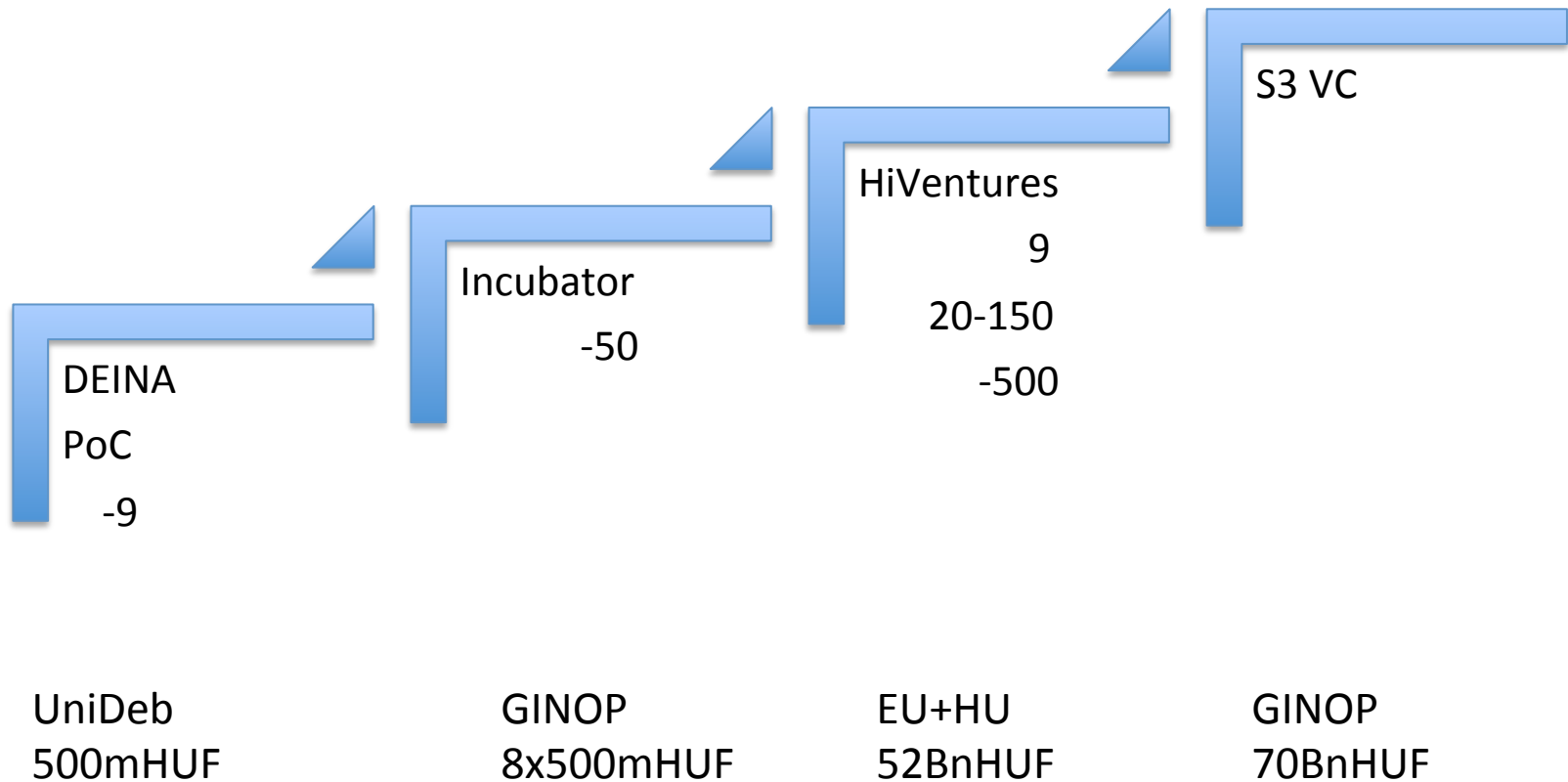
Debrecen Venture Catapult I.



Debrecen Venture Catapult II.



Finanszírozási folytonosság



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