



**Innovation  
Academy**

# Innovation Academy: A New Education System for Top-end Software Engineer

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Innovation Academy





All are AI, software companies  
to make

A dense field of many national flags on tall poles against a clear blue sky. The flags are of various colors and designs, including the flag of the United States, the flag of the United Kingdom, the flag of the United Nations, and many others. The flags are arranged in rows, creating a sense of depth and scale.

**All nations seek sustainable  
innovation in public sector**

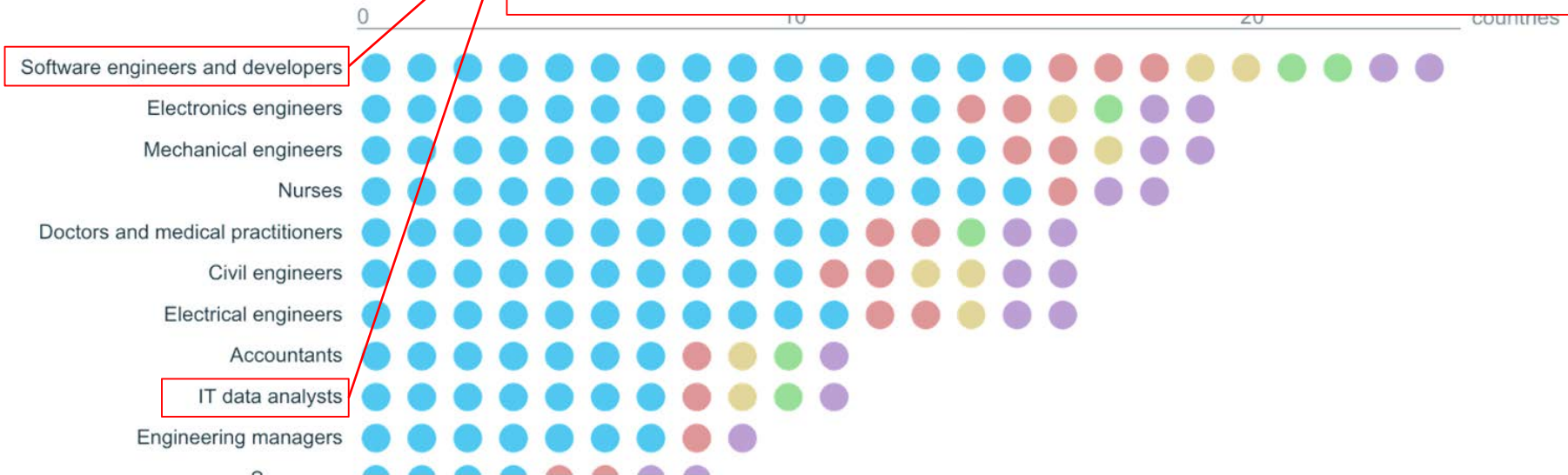
# THE WORLD'S MOST IN DEMAND PROFESSIONS

Across the developed countries of the world, skilled professionals are in high demand. Software engineers are needed in 24 countries, nurses are needed in 18, while 11 countries report a shortage of accountants. Explore the chart below to see which occupations are most in demand across the world and discover which skills are needed.

● Europe ● North America ● South America ● Asia ● Oceania

Search by occupation

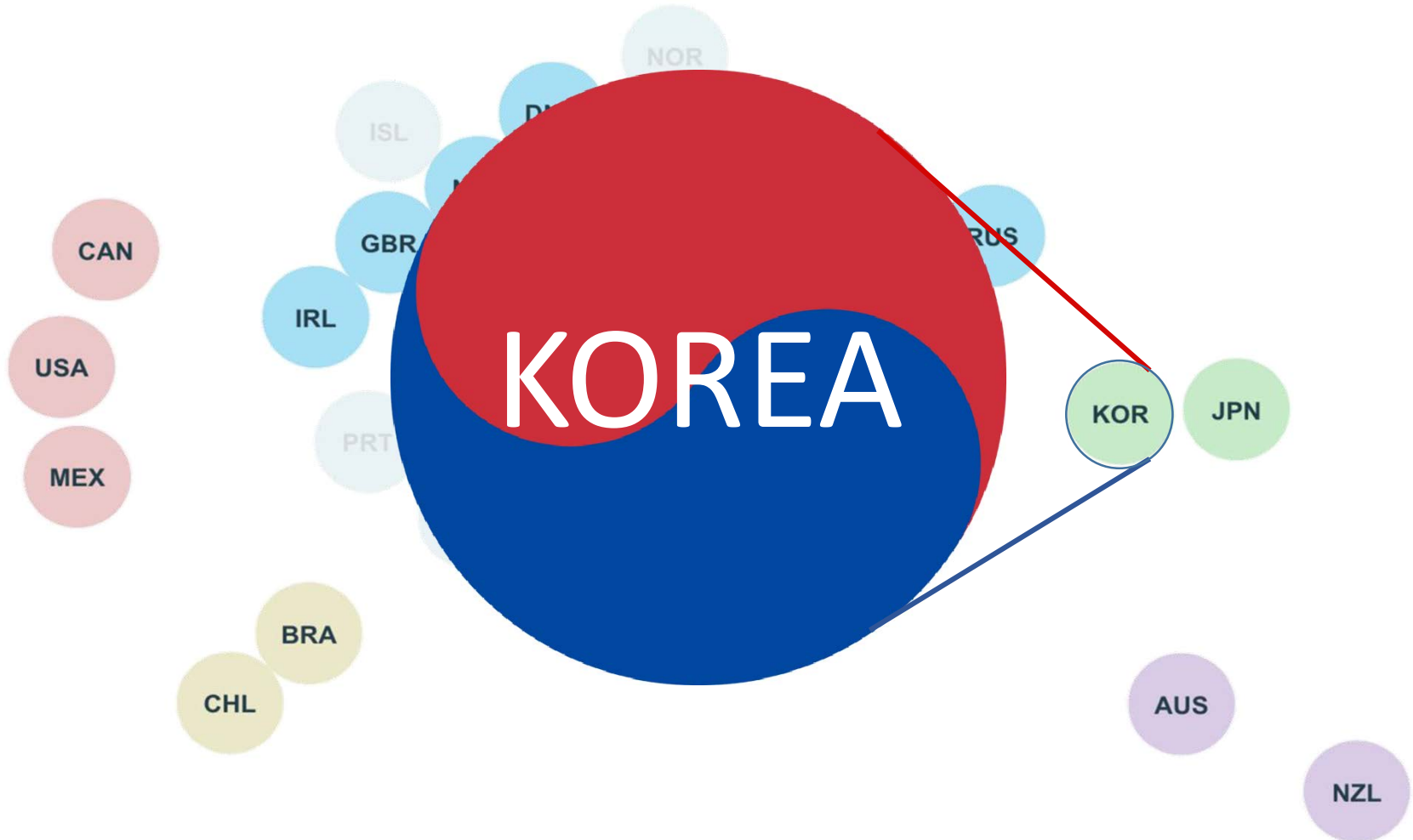
- **Software Engineers and Developers**
- **IT Data Analysts**



<https://www.michaelpage.co.uk/minisite/most-in-demand-professions/>

# Countries where software engineers and developers are in demand

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# Innovation Academy

A new approach to handle the high-tech human resource shortage

- A Government funded institute to
  - ✓ foster 500+ /year top-end developers
  - ✓ test and build innovative education systems
  - ✓ open all data and source of the systems
  - ✓ lead old industry to the software eco system

First Phase Funding: US\$160M from 2019 to 2023



# Innovation Academy

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**5C** are the core competencies for the future society

Critical  
thinking

Challenge

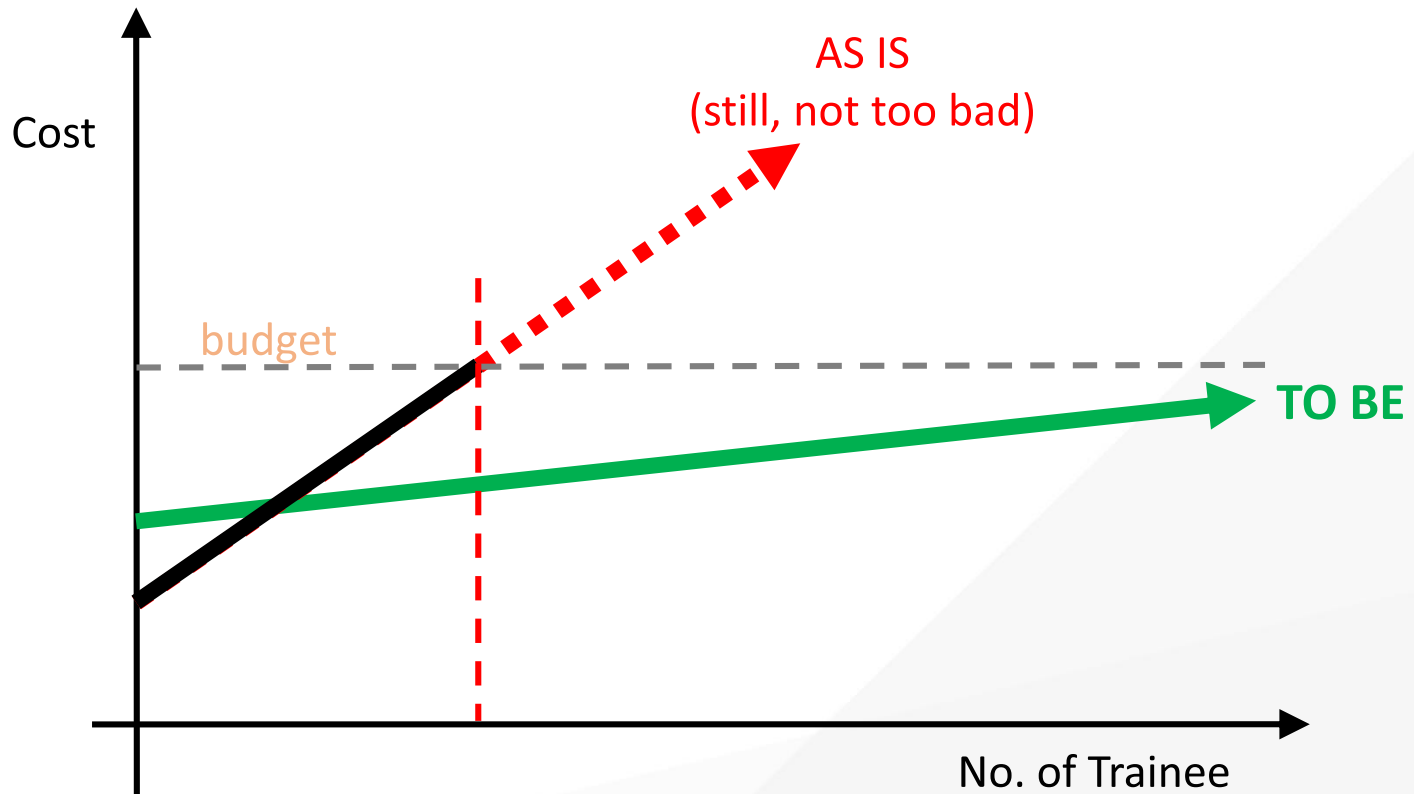
**Creativity**

Collaboration

Convergence

# Innovation Academy

What is "THE INNOVATION" in Education?

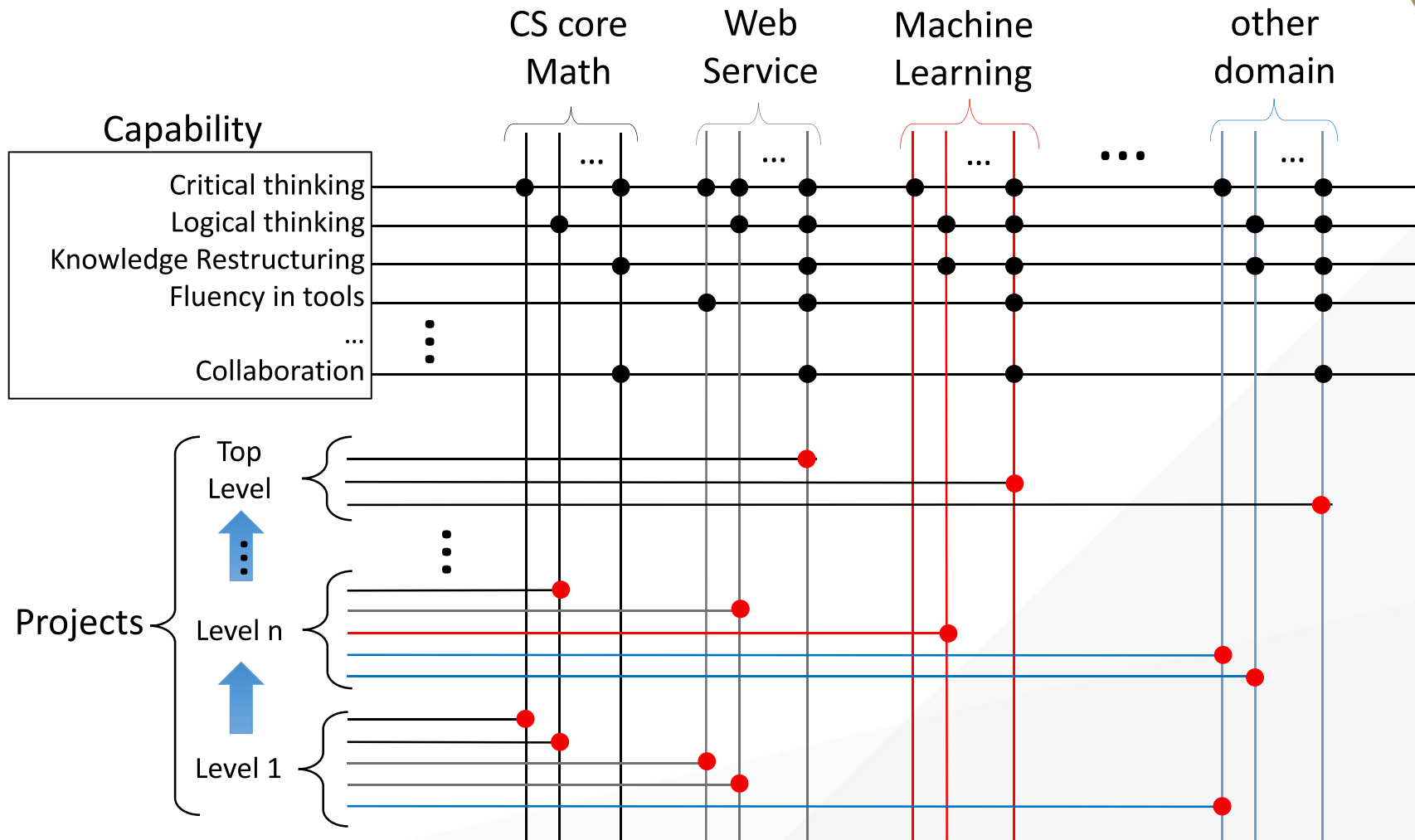


# What is the **Innovation** in education?

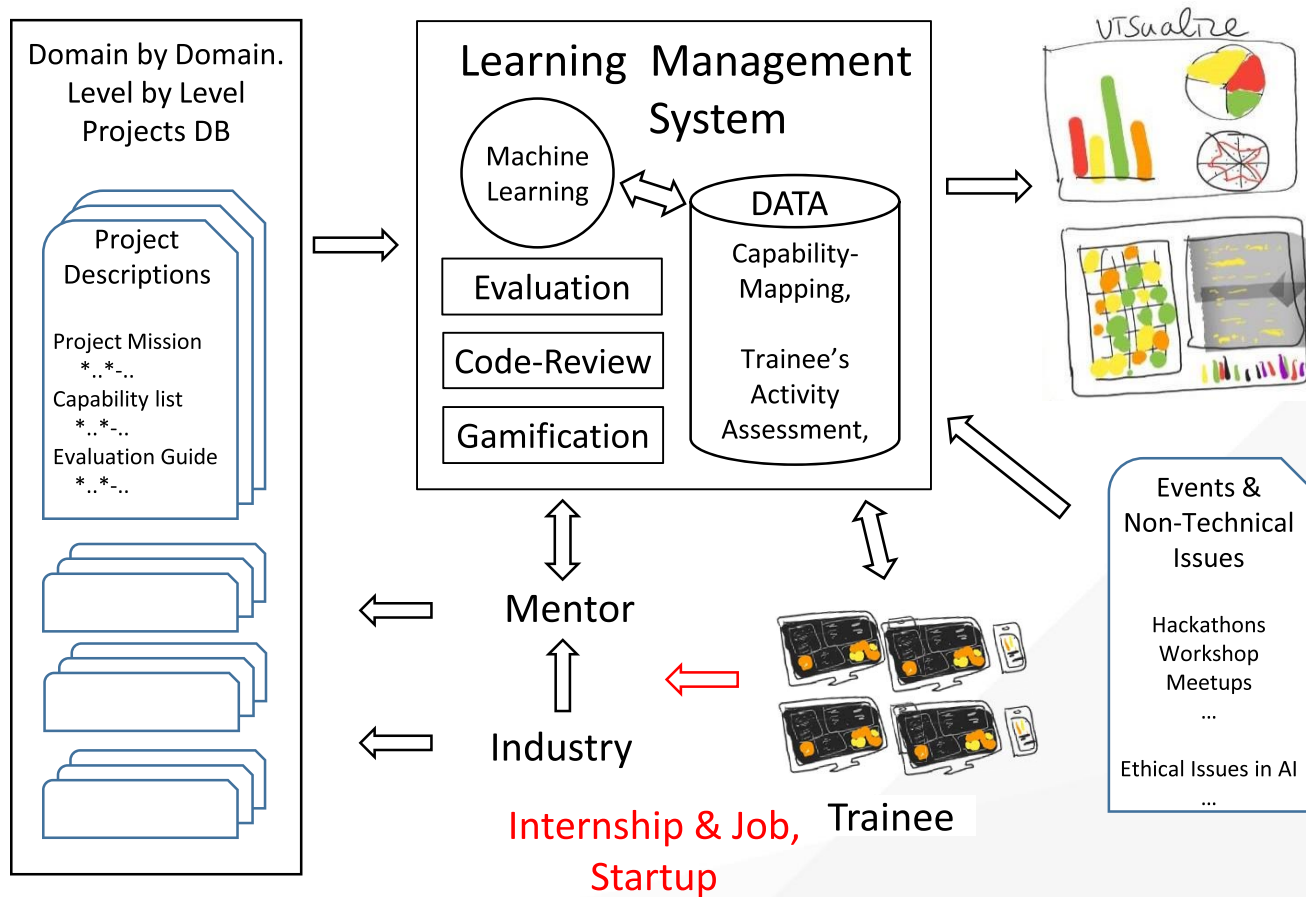
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- The Sources of THE INNOVATION
  1. Students has been learning by themselves from the internet
    - ✓ Excellent educational resources are everywhere
    - ✓ ‘Learning by making’ practice is really working
    - ➔ No teacher, just peer–learning and mentoring
  2. Level by Level adaptive learning
    - ✓ Well designed projects and review process
    - ✓ Level by level, capability by capability rubrics
    - ➔ System–driven, Data–driven Learning
    - ➔ Certification with quantified capability

# Mapping capability to projects



# LMS, all open source



# Innovation Academy

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Is worth for tax money?

1. Filling the big demand–supply gap in professions of AI, software field
2. Going first for both effective and innovatively efficient education system
  - Private sectors are hesitating to invest, because most of the new education system are expensive and usually fails
  - Innovation Academy will open all the data of both successful and non–successful cases
  - Private sectors can follow and upgrade the successful cases with open data, knowhows and highly predictable budget
3. The developed open–source LMS can be applied to other vocational educations and colleges.

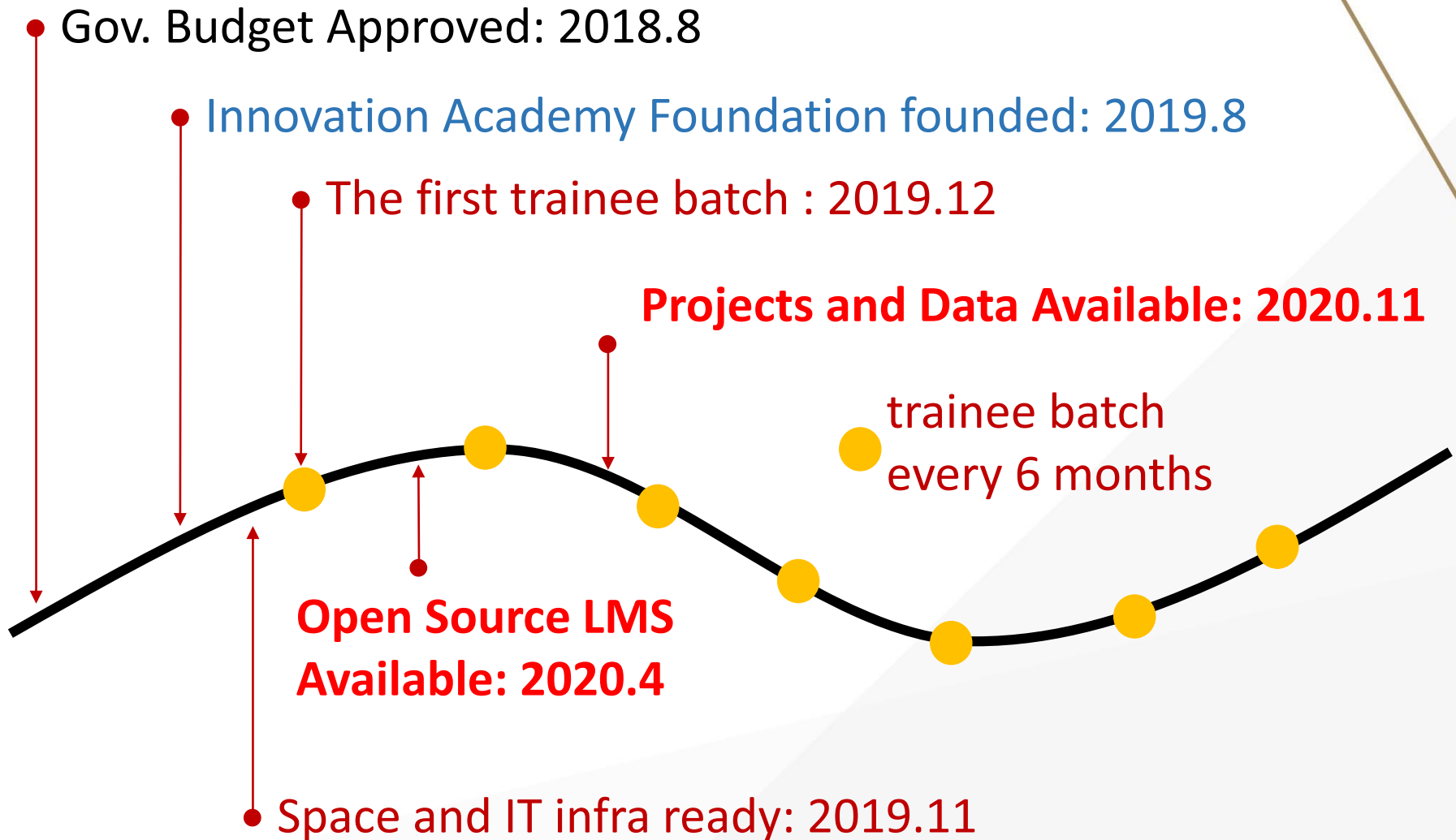
# One more mission ...

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Is to Lead Traditional Industry to software developer eco-system

- The traditional, aka. old/manufacturing industry was basically process-oriented, not service-oriented.
  - Software and AI are redefining the values of their products
  - Processes are moving into a new era by machine learning driven edge computing and digital twins technology.
- A good news is that **they have very high potential to make good jobs**. A bad news is that they are not part of software developer eco-system, at least in Korea.
  - Innovation Academy will lead them to software eco-system, by help them to change their working environments and to learn Tech-HR, developer relationship so software developers can think the companies as “SOFTWARE COMPANIES”.

# Innovation Academy: ROADMAP



# Thank You