



universität
wien

entrepreneurship

UC3M OPEN SCIENCE CAFÉ

**OPEN INNOVATION &
ENTREPRENEURSHIP**

MARCO MASIA

15-Y RESEARCH EXPERIENCE

- MSc Chemistry, PhD Physics
- Assistant Professor at University of Sassari
- Author of 52 papers
- Invited speaker to international conferences
- Mentor of more than 30 students

10-Y MANAGEMENT EXPERIENCE

- Masters of Business Administration
- Executive Coordinator of Initiative for Science in Europe
- Managing director of a company
- Vice Chair and Board Member of an international not for profit organisation

8-Y START-UP EXPERIENCE

- Head of Entrepreneurship @ Uni Vienna
- Start-up founder
- Mentor at EIC and EIT
- Innovation consultant
- Advisor of 100+ start-ups

(OPEN) INNOVATION

WHAT IS INNOVATION?

Innovation is the specific tool of entrepreneurship, the means by which entrepreneurs exploit **change as an opportunity** for different business or a different service. (Peter Drucker, 1985)

**BUSINESS
OPPORTUNITIES**

TECHNOLOGY

**ARTIFICIAL
INTELLIGENCE**

STEVE JOBS

**WHAT COMES
TO YOUR MIND WHEN
YOU HEAR ABOUT
INNOVATION?**

**PUBLIC SERVICE
NOT-FOR-
PROFIT
MILITARY**

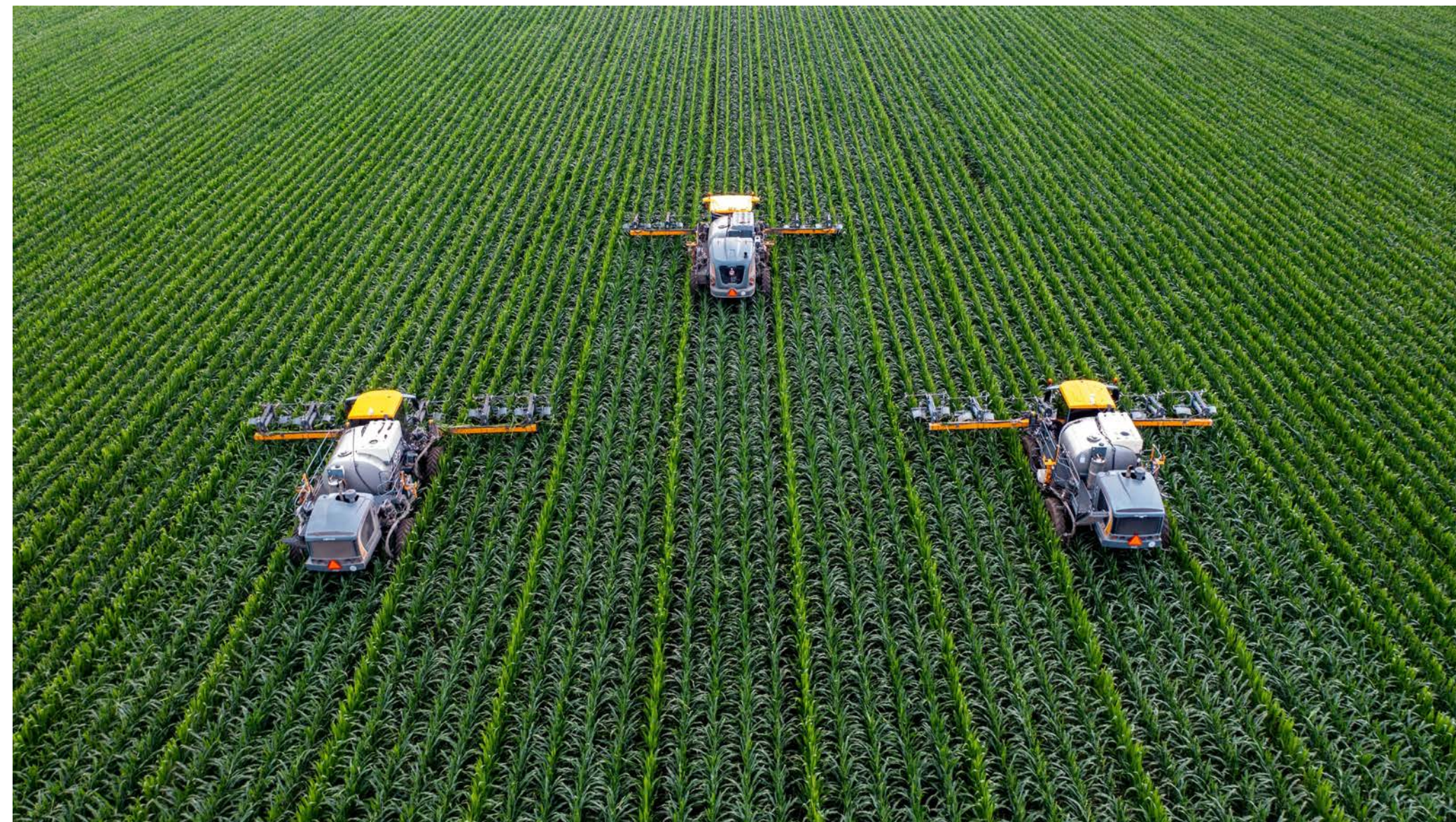
**INSTALLMENT
PAYMENTS**

**CLIMATE
CHANGE**

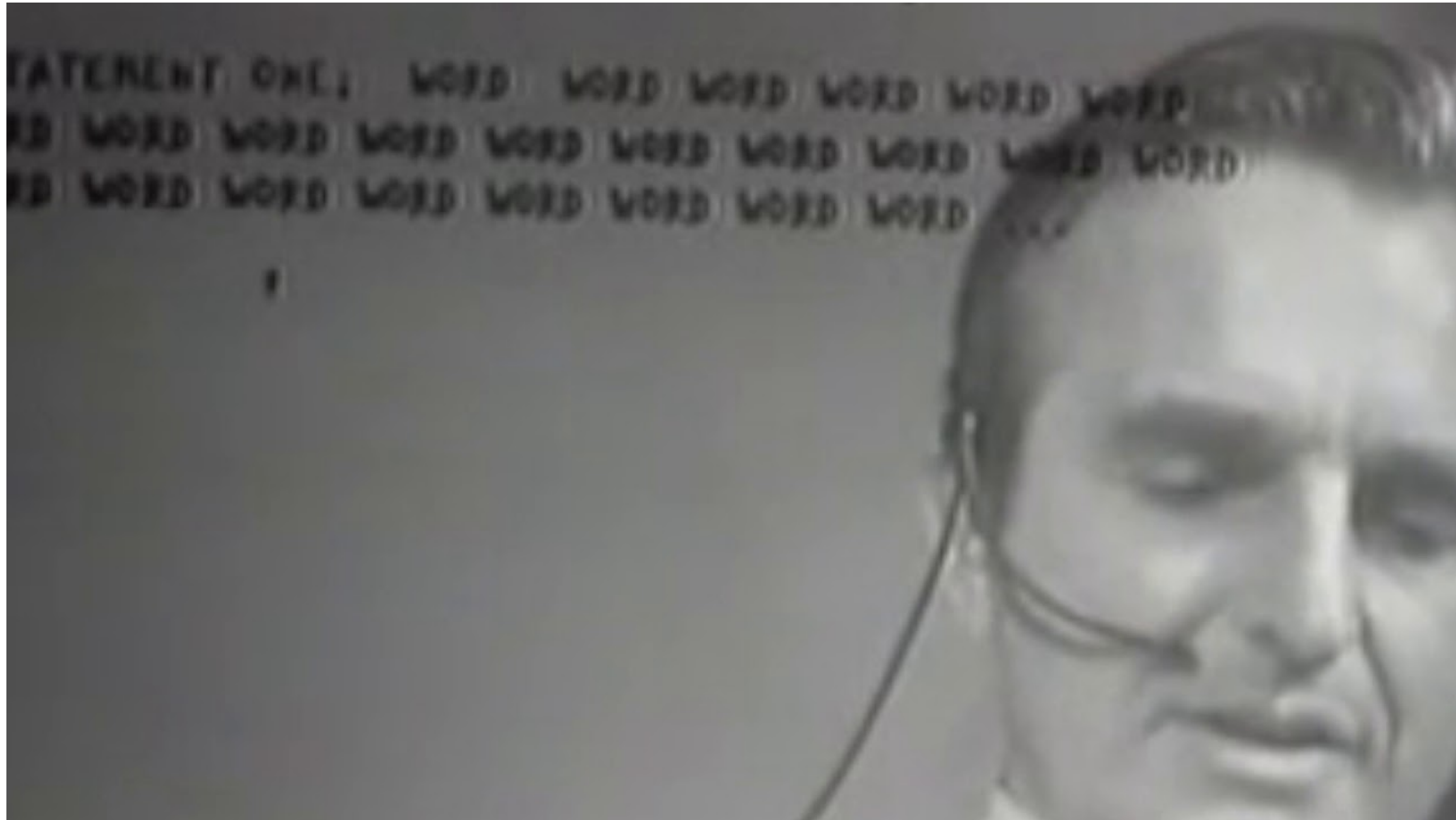
**DOUGLAS
ENGELBART**

WHAT'S YOUR FAVORITE INNOVATION?

INSTALMENT PAYMENTS



THE MOTHER OF ALL DEMOS

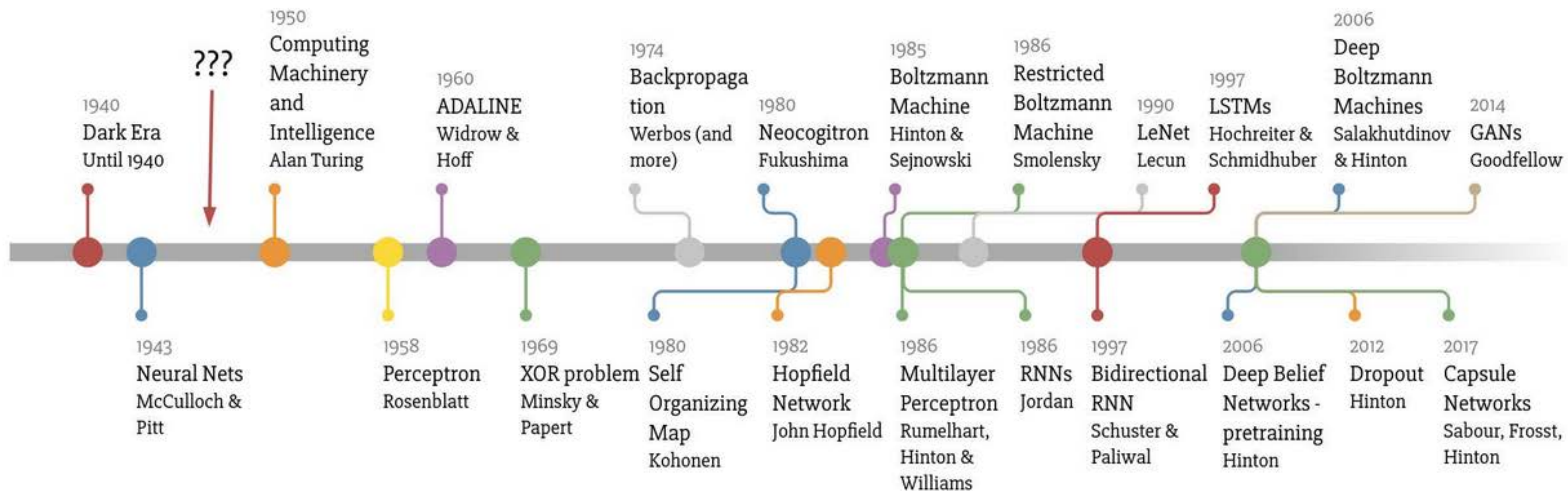


[YouTube long version](#)

[YouTube short version](#)

INNOVATION = INVENTION * COMMERCIALIZATION

Deep Learning Timeline



Qubit Timeline Estimates



Note: Dates are speculative
ID: 374252

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**INNOVATION
IS NOT A
SINGLE EVENT**

**KNOWLEDGE
DRIVEN
INNOVATION IS
*HIGH RISK HIGH
GAIN AND
TAKES LONG
TIMES***

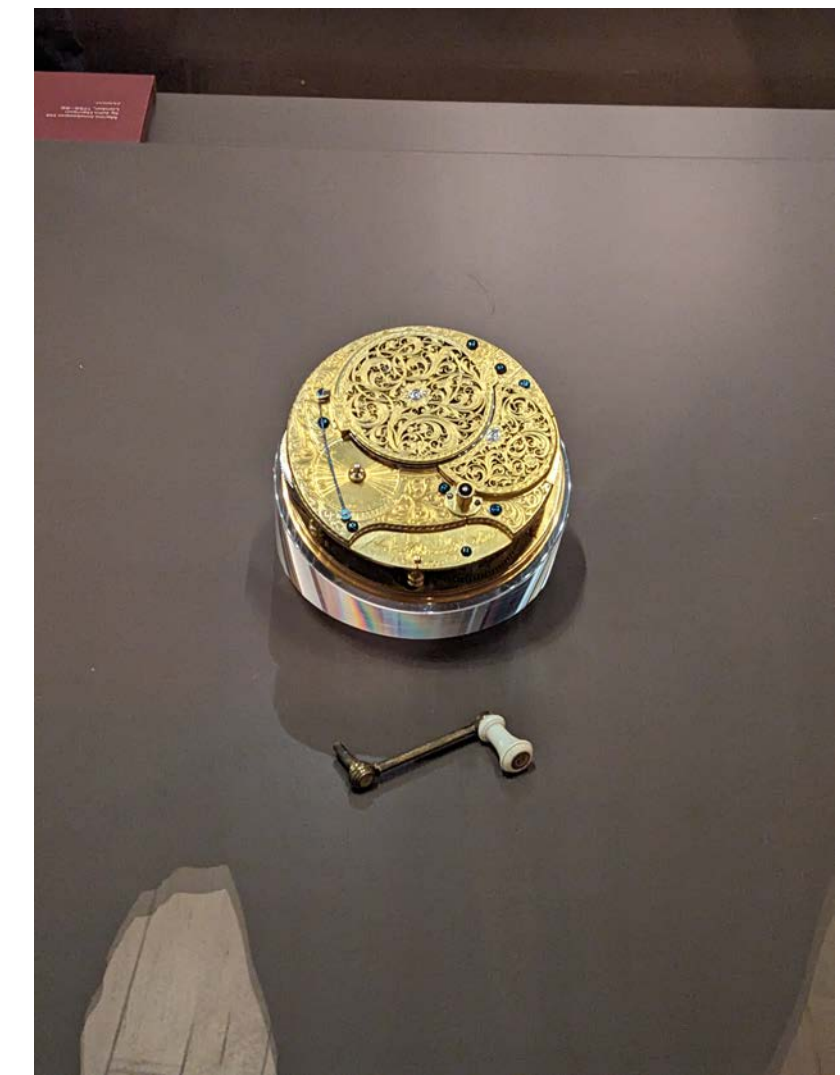
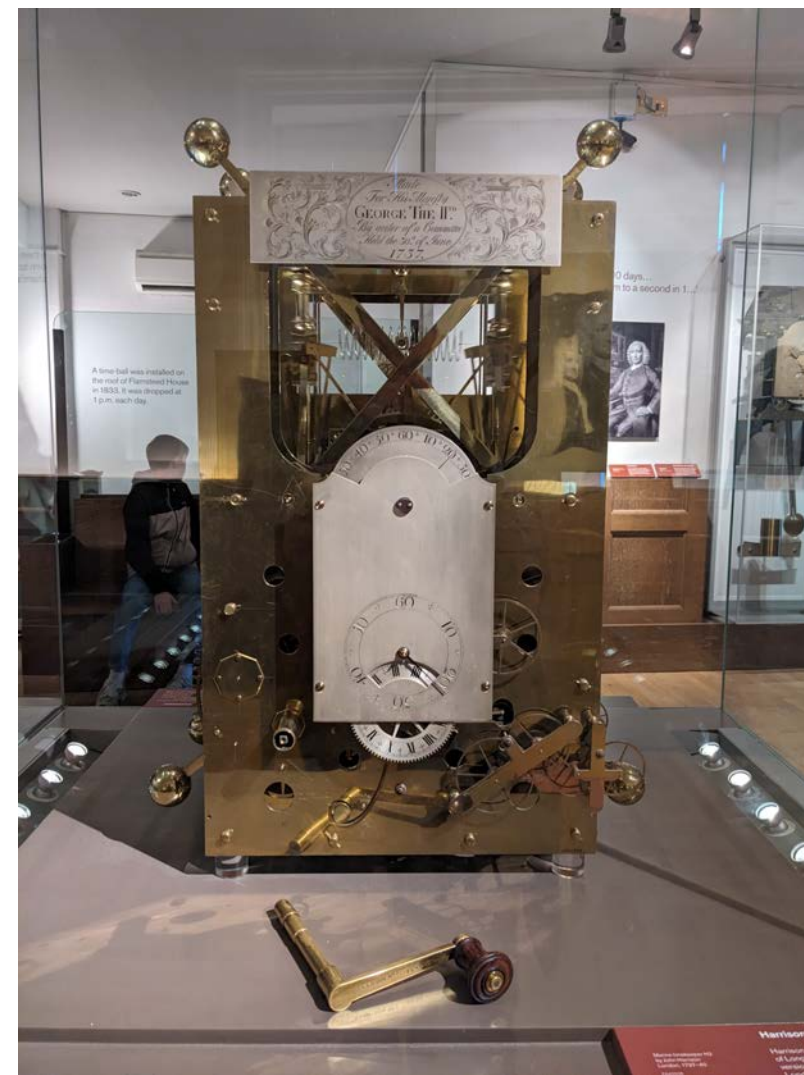
**INSIGHTS ABOUT
INNOVATION**

**THE CUSTOMER
IS KEY TO
SUCCESSFUL
INNOVATION**

**NEW BUSINESS
MODELS ARE
THE KEY TO
DISRUPT THE
MARKETPLACE**

WHAT IS OPEN INNOVATION?

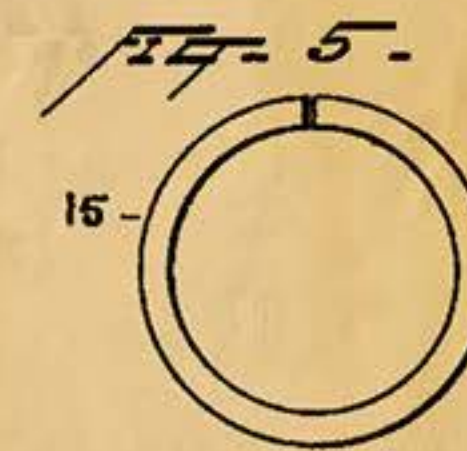
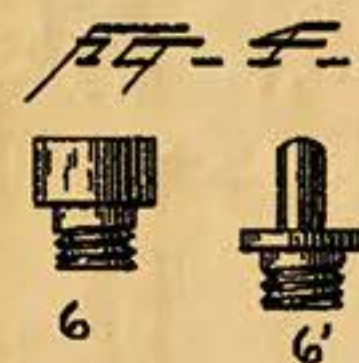
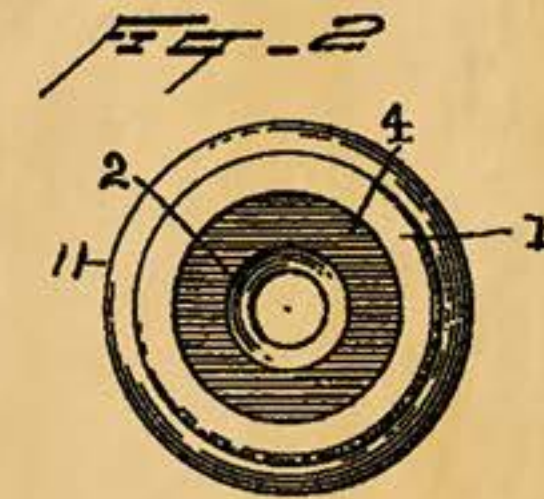
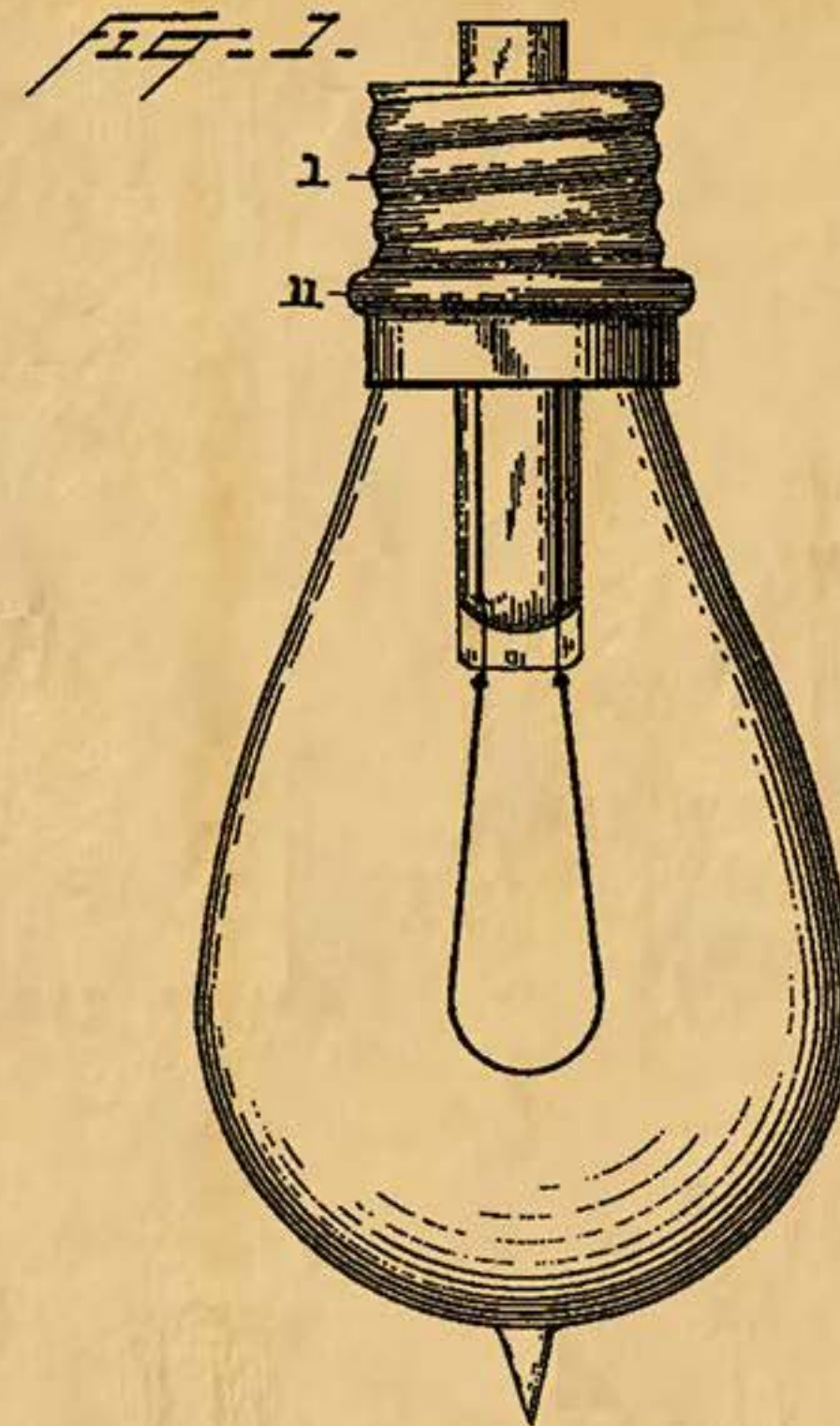
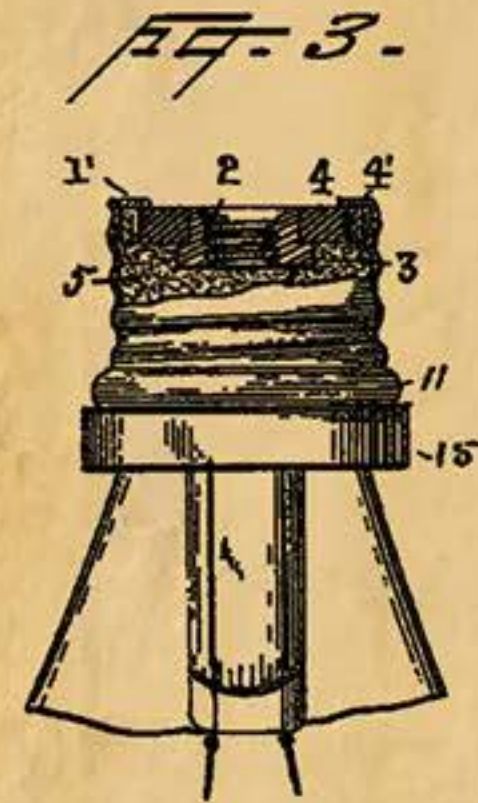
DETERMINING LONGITUDE AT SEA



T. A. EDISON.
LAMP BASE.

No. 438,310.

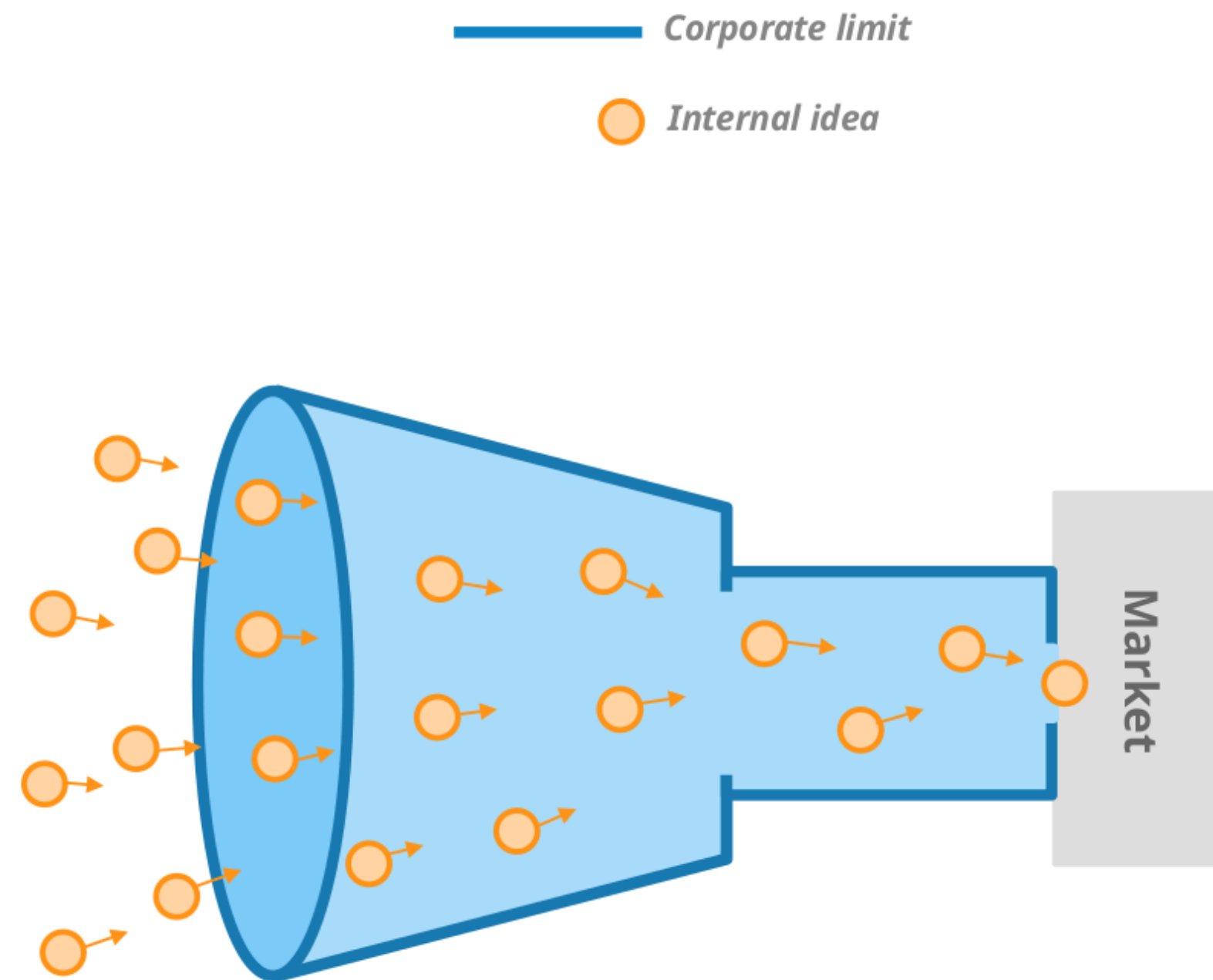
Patented Oct. 14, 1890.



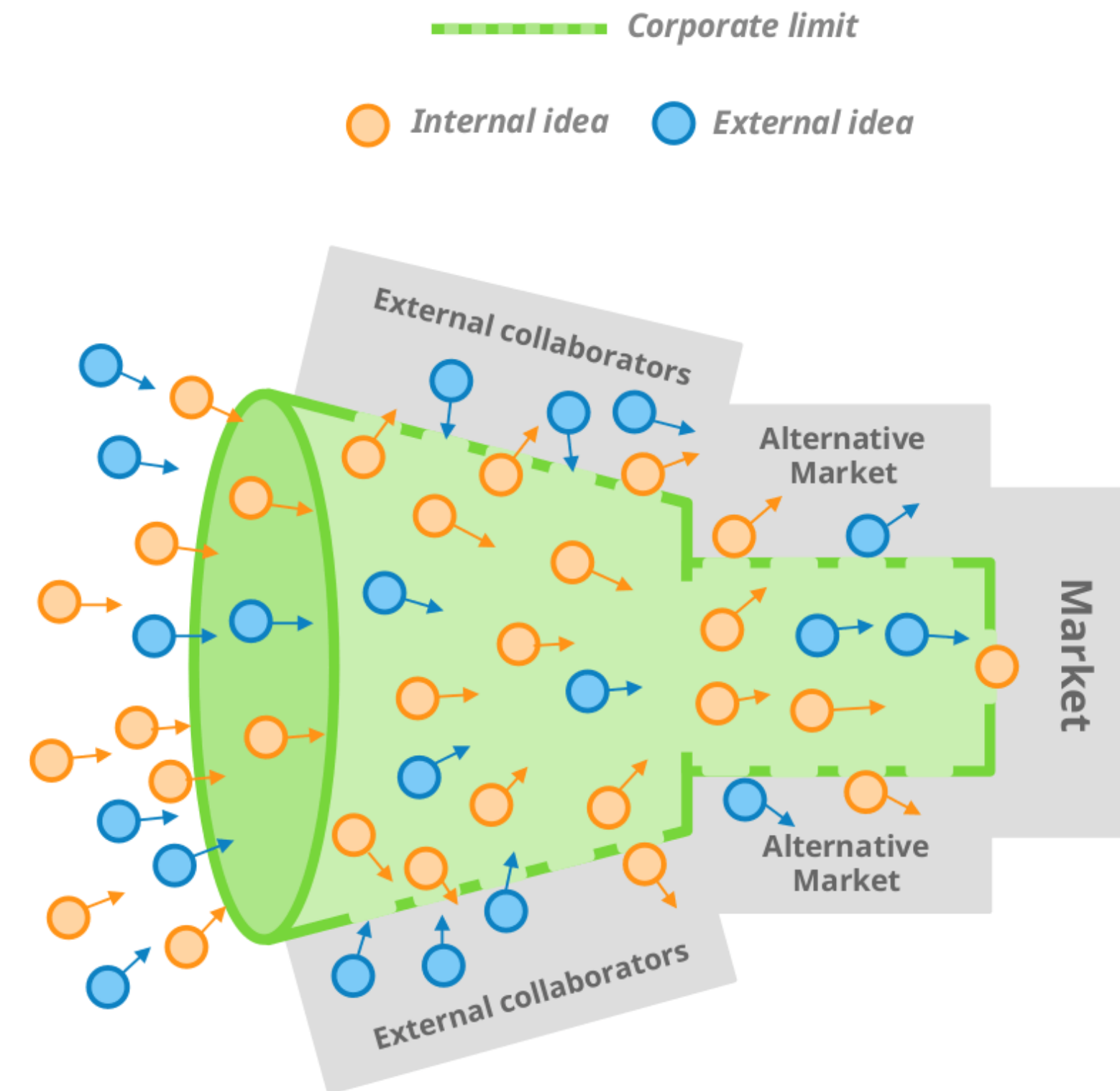
Witnesses
Norris A. Clark,
Charles M. Catlin

Inventor
By his Attorneys T. A. Edison.
Byert Seely.

Closed Innovation



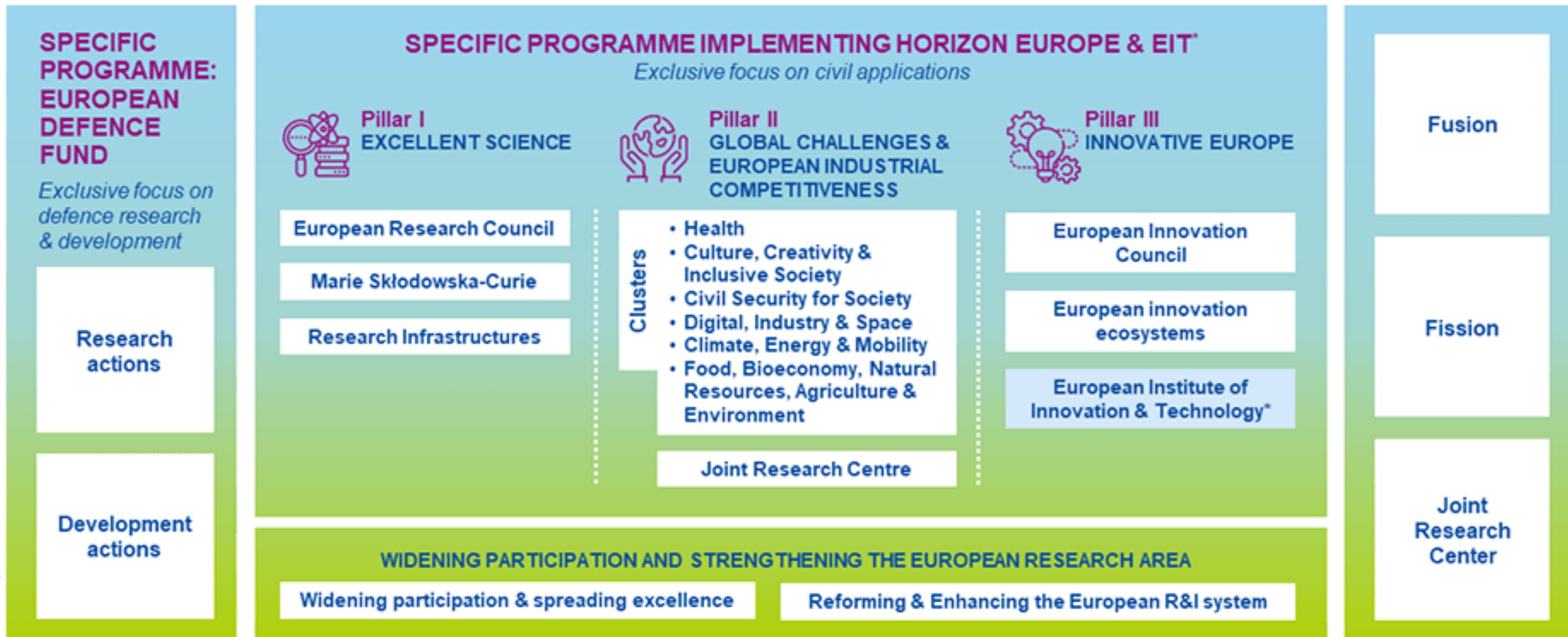
Open Innovation



Henry Chesbrough, "Open Innovation: The New Imperative for Creating and Profiting from Technology", HBS Press, 2003

HORIZON EUROPE

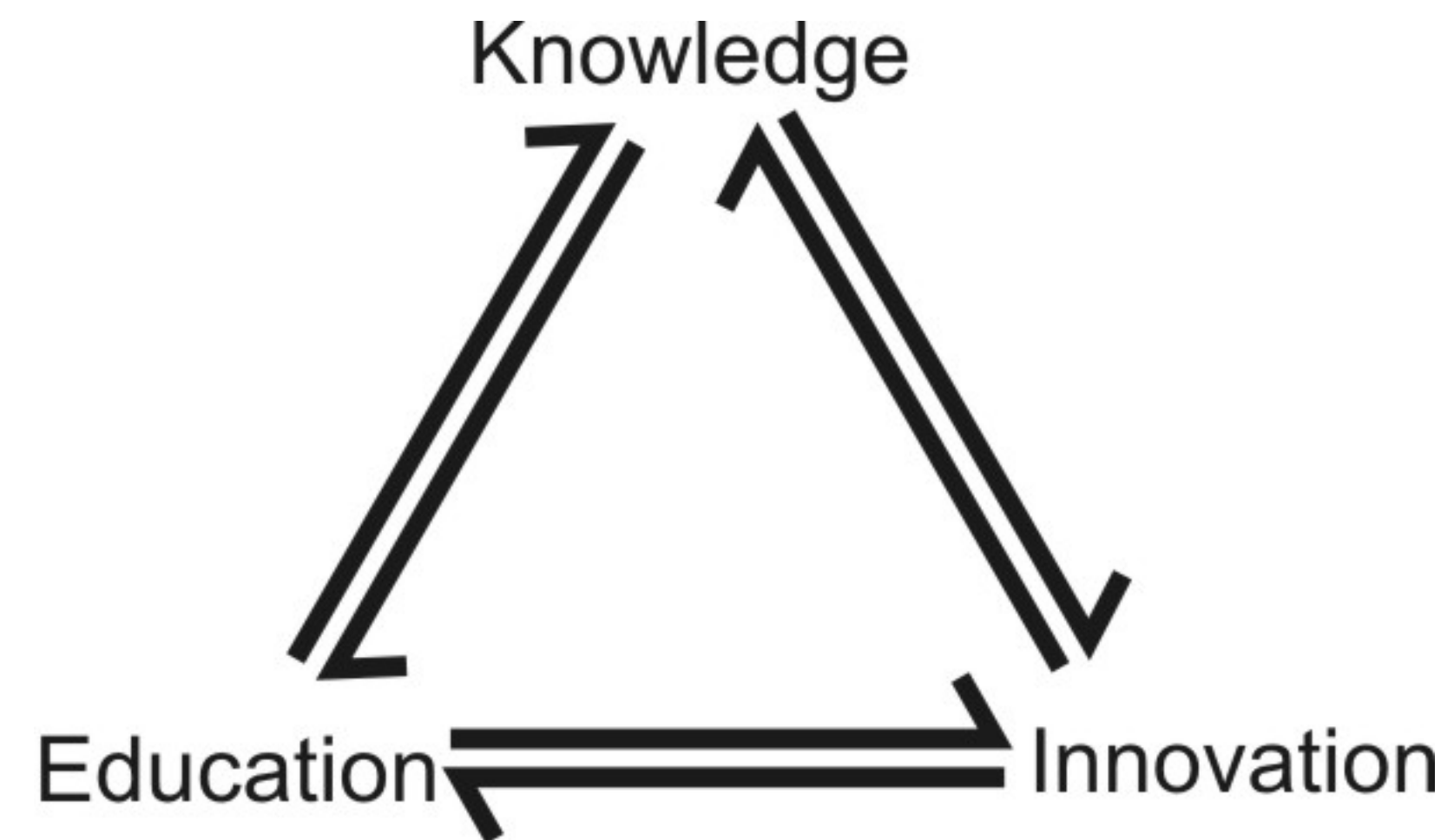
EURATOM



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* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

THE KNOWLEDGE TRIANGLE



“Innovation is messy business [...] We expect innovations to be well dressed, smooth talking, and brilliantly executed, but the reality is that the innovation process is anything but smooth or shiny. It stutters. It is often overweight and poorly groomed, with dark circles under its eyes from overwork. It comes into the world stumbling and falling, only later to gain Olympic level prowess. We glamourize the 1 percent inspiration but forget about the 99 percent perspiration. After all, perspiration stinks.”

Greg Satell

ENTREPRENEURSHIP

WHAT IS AN ENTREPRENEUR?

MEET NICOLE



PhD: bio-engineering

Best EU PhD 2015

Start-up: crowdfunding for artists

More start-up: starting spin-off

MEET NICOLE



In my case, the point is to seize new opportunities when they arise by committing to them. Once I commit, I always do my best to make them fly. Otherwise, it's wasted time and efforts. Of course, it's perfectly fine not to succeed. What is not fine, is not to try!

Strengths: optimism, sense of humour

MEET DAVID



PhD: Medieval literature

Avid reader

Lived in many countries

Start-up: successful AI company

MEET DAVID



I think that all tech start-up would fare better if they cultivate their humane side. Getting to know in depth different cultures and the knowledge of literature has endowed me with good instincts about human nature and how people react to nudges.

Strengths: curiosity, open mindset

The entrepreneur always searches for **change**, responds to it,
and exploits it as an **opportunity** (Peter Drucker, 1985)

WHAT IS AN ENTREPRENEUR?

Entrepreneurship is when you act upon **opportunities** and ideas and
transform them into **value for others** (Joint Research Center, 2016)

VALUE CREATION

Financial

Generate financial revenue

Social

Enhance social conditions

Cultural

Enrich people's cultural experience

THE ENTRECOMP FLOWER

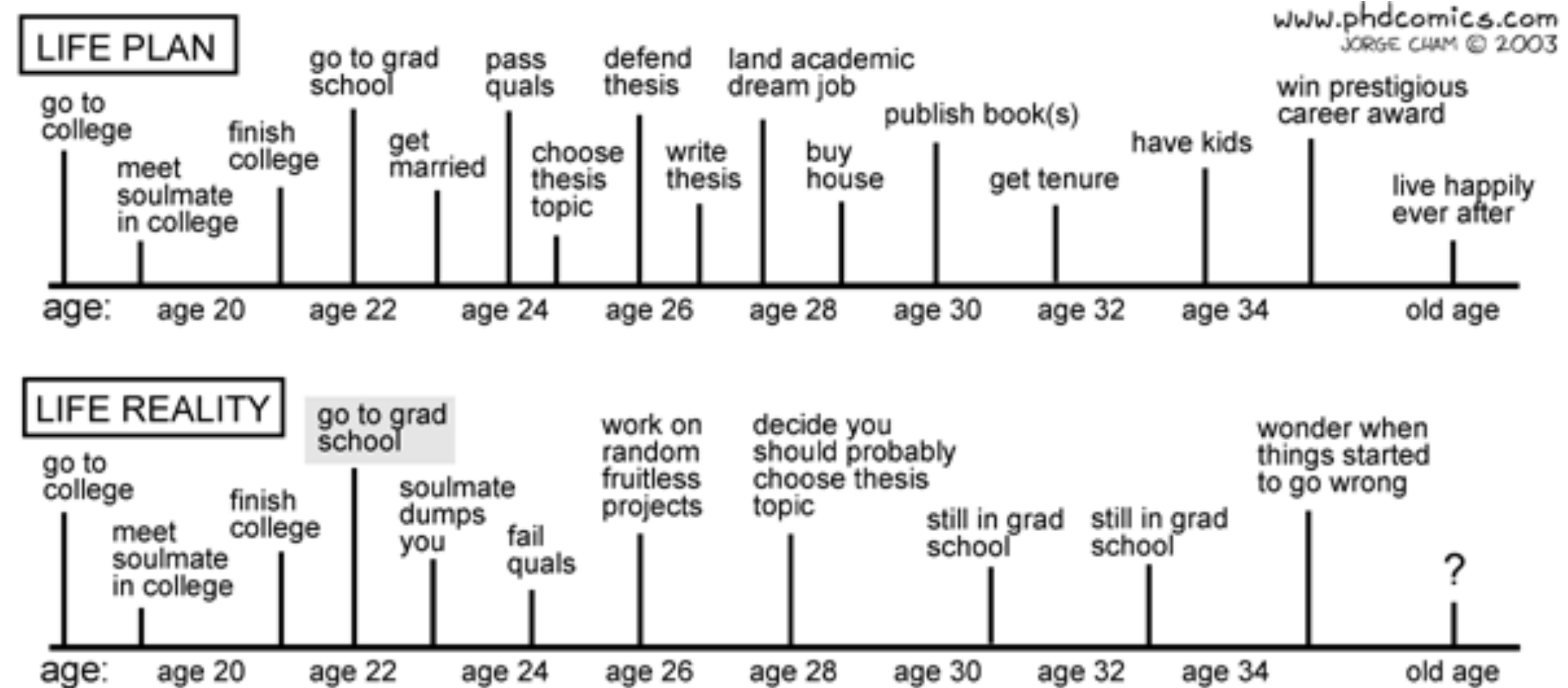


Credits: Bacigalupo, M., Weikert García, L., Mansoori, Y., O'Keeffe, W. "EntreComp Playbook", Publications Office of the European Union, Luxembourg, 2020.

WHY IS THIS RELEVANT?

Piled Higher and Deeper by Jorge Cham

www.phdcomics.com



title: "Life Plan vs. Life Reality" - originally published 8/28/2003

Automated Manufacturing



Big Data



Artificial Intelligence



Self-driving car



Automated assessment



2.5 Quintillion bytes stored per day

2 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0



and it's only about technology...

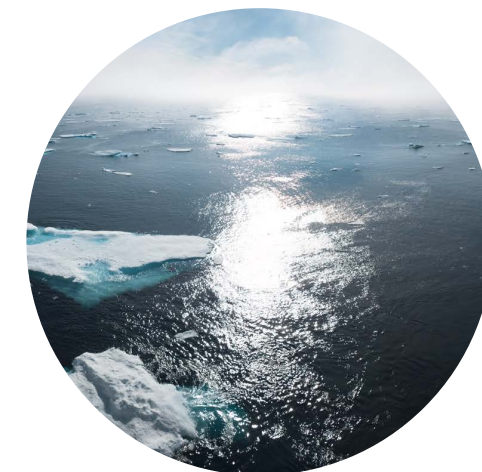


Climate change



Ageing population

Change is picking up quickly...



...but humanity struggles to keep up!

KEEP LEARNING & DEVELOP UNIQUE HUMAN SKILLS



