

REGINNA^{4.0}

Innovation on the field

from invention to innovation

Simon Mokorel

Supported by



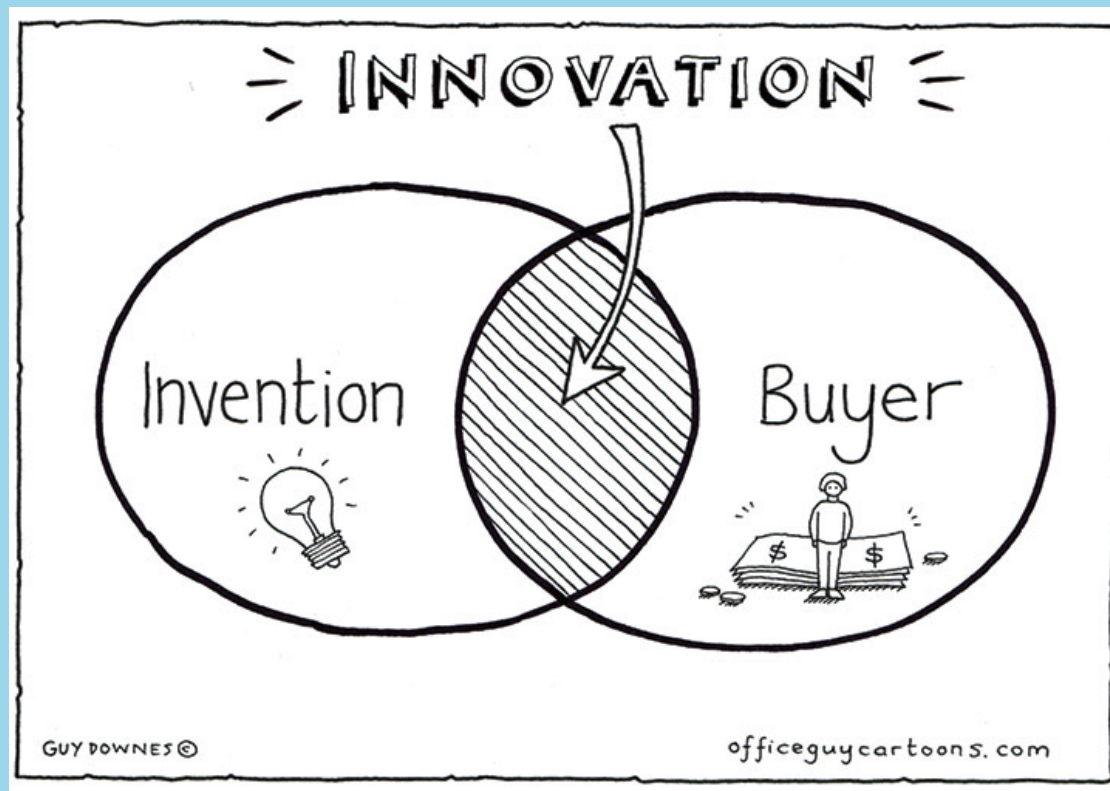
Funded by the
European Union



www.reginna4-0.eu

INVENTION <-> BUYER

An invention is a novel and innovative creation, process, product, or idea that is the result of human ingenuity and problem-solving. Inventions are typically characterized by their originality and the way they contribute to solving a specific problem, improving an existing technology, or creating something entirely new. Here are some key aspects of inventions:



1. **Novelty:** An invention must be new and different from existing solutions or ideas. It introduces something that has not been previously known or used.
2. **Usefulness:** Inventions are designed to serve a practical purpose or address a specific need. They are often created to make tasks easier, improve efficiency, enhance quality of life, or provide new capabilities.
3. **Inventorship:** Inventors are the individuals or teams who conceive and develop the invention. They are responsible for its creation and are often granted intellectual property rights, such as patents, for their innovations.
4. **Problem-Solving:** Many inventions arise from the identification of a problem or a challenge and the development of a creative solution to address it.

KEY ASPECTS OF INVENTIONS:

KEY ASPECTS OF INVENTIONS:

- 1. Intellectual Property:** To protect inventors' rights and provide them with exclusive control over their creations, many countries offer legal mechanisms such as patents, copyrights, or trademarks.
- 2. Impact:** Inventions can have a significant impact on various aspects of society, including technology, healthcare, industry, transportation, communication, and more.
- 3. Iterative Process:** The process of inventing often involves multiple iterations, refinements, and improvements. Inventors may need to test, prototype, and refine their creations before achieving a final, market-ready product.
- 4. Historical Significance:** Many inventions throughout history have had profound effects on society, leading to advancements, innovations, and changes in how people live and work.

**nOTABLE
iNVENTIONS
tHAT
cHANGED
tHE
wORLD**

nOTABLE iNVENTIONS tHAT cHANGED tHE wORLD

WHEEL

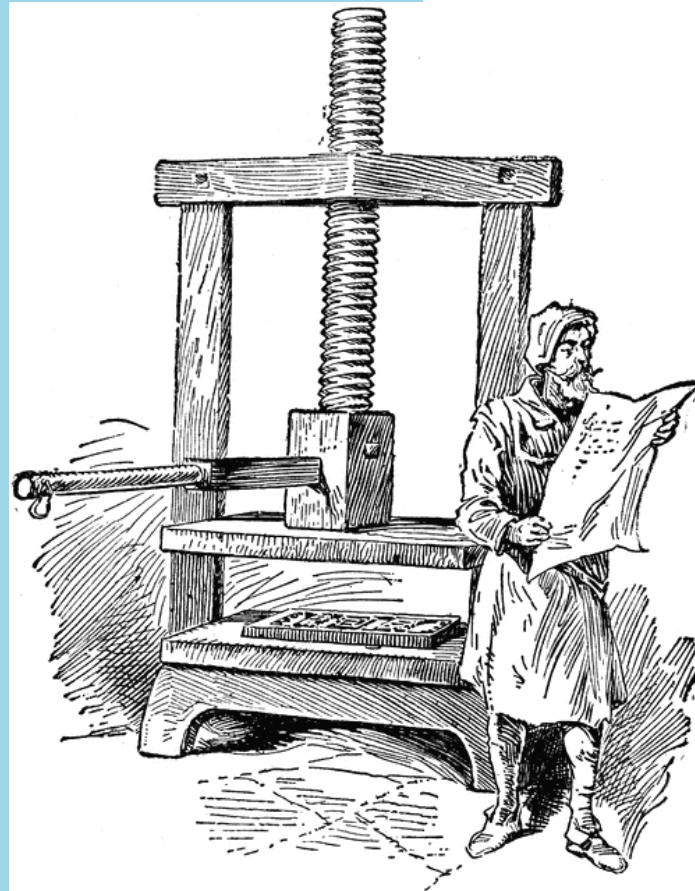
"The stroke of brilliance was the wheel-and-axle concept,"



nOTABLE iNVENTIONS tHAT cHANGED tHE wORLD

PRINTING PRESS

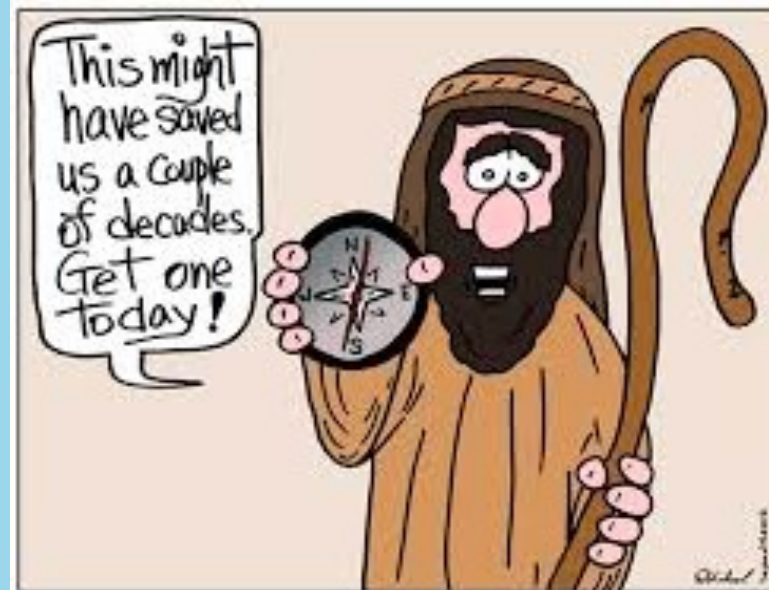
German inventor Johannes Gutenberg invented the printing press sometime between 1440 and 1450.



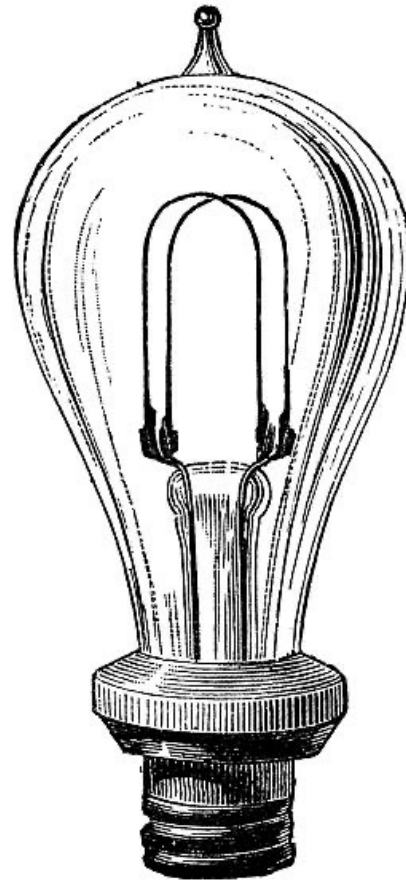
nOTABLE iNVENTIONS tHAT cHANGED tHE wORLD

COMPASS

Ancient mariners used the stars for navigation, but this method didn't work during the day or on cloudy nights, making it dangerous to travel far from land.



nOTABLE iNVENTIONS tHAT cHANGED tHE wORLD



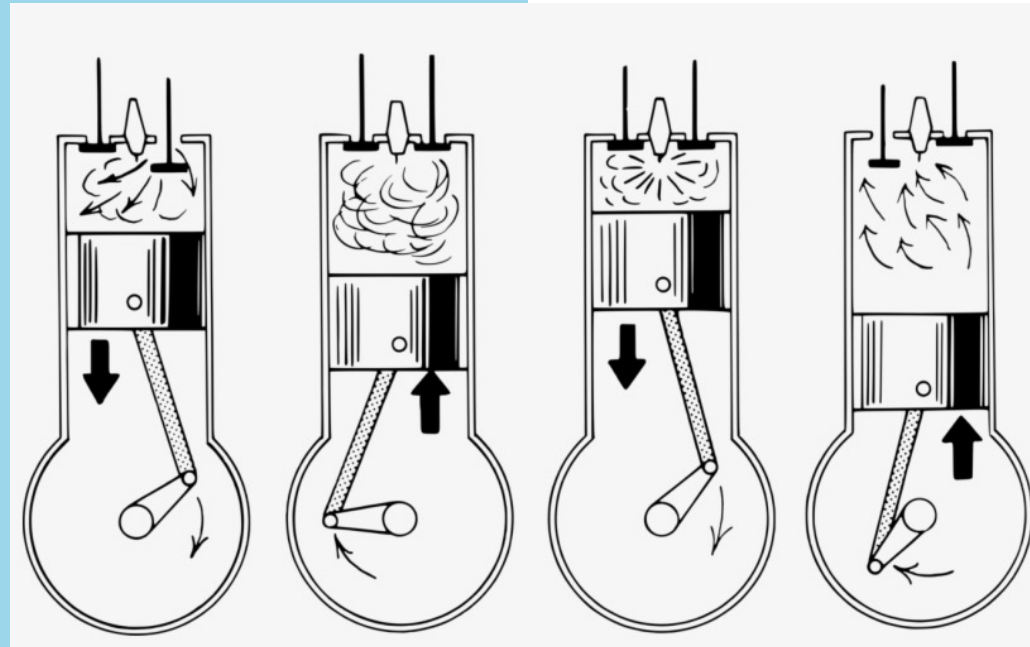
LIGHT bULB

The invention of the light bulb transformed our world by removing our dependence on natural light, allowing us to be productive at any time, day or night.

NOTABLE INVENTIONS THAT CHANGED THE WORLD

INTERNAL COMBUSTION ENGINE

In these engines, the combustion of fuel releases a high-temperature gas, which, as it expands, applies a force to a piston, moving it.



nOTABLE iNVENTIONS tHAT cHANGED tHE wORLD

AND MANY OTHERS

PENICILLIN

TELEPHONE

INTERNET

NAILS

USE OF FIRE

CONCRETE

MAGNIFYING GLASS

BATTERIES

AIRPLANE

REFRIGERATOR

NUCLEAR ENERGY

VACCINES

X- RAYS

nOTABLE iNVENTIONS tHAT cHANGED tHE wORLD

DANGERES TO HEALTH OR ENVIRNOMENT

LEAD IN GASOLINE

PRO

The world started adding lead to gasoline in the 1920s. The reason was that it is an 'antiknock agent' which improved the efficiency of vehicles and the performance of the engine. It turned clunky engines into smoothly running engines.

CONS

Leaded petrol has caused more exposure to lead than any other source worldwide. By contaminating air, dust, soil, drinking- water and food crops, it has caused harmfully high human blood lead levels around the world, especially in children.

nOTABLE iNVENTIONS tHAT cHANGED tHE wORLD

The ozone layer in the stratosphere absorbs a portion of the radiation from the sun, preventing it from reaching the planet's surface. Most importantly, it absorbs the portion of UV light called UVB. UVB is a kind of ultraviolet light from the sun (and sun lamps) that has several harmful effects.

DANGERES TO HEALTH OR ENVIRNOMENT

CFC

PRO

Chlorofluorocarbons (CFCs) are nontoxic, nonflammable chemicals containing atoms of carbon, chlorine, and fluorine. They are used in the manufacture of aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants.

CONS

Chlorofluorocarbons (CFCs), contain chlorine atoms. Releasing chlorine atoms into the atmosphere destroys ozone. A single chlorine atom can destroy thousands of ozone molecules.

INTRODUCTION ON INNOVATION

Innovation can be defined as the process of creating and implementing new ideas, products, services, or processes that bring about significant improvement, change, or value.

Innovation is driven by users problems/challenges and by inventions

Innovations have a positive impact on society, environment, business,

Why we innovate, why the innovation is important?

tECHNOLOGY: Innovation drives advancements in technology, leading to groundbreaking inventions and transformative changes in how we live, work, and communicate. I1.0 to I4.0 (I5.0)

hEALTHCARE: Innovation in healthcare plays a vital role in improving patient outcomes, enhancing diagnostics and treatments, and addressing complex medical challenges.

eNVIRONMENT: Innovation is critical for addressing environmental challenges and achieving sustainability.

sOCIAL eNTREPRENEURSHIP: Innovation in social entrepreneurship combines business principles with a focus on creating positive FINANCIAL impact.

Cases of innovations

Mobile Banking and Digital Payments

3D Printing

Renewable Energy Technologies

Telemedicine

Social Media and Online Networking

Electric Vehicles

Precision Agriculture

Assistive Technologies

Online Learning Platforms

Water Purification Technologies

Blockchain Technology

Invetions:

- Internet
- Big data
- Money

Buyers:

- Ease of use
- Quick translactions
- Control ower my money

Mobile banking and payments

Inventions:

- New materials
- new injection molding technologies

Buyers:

- Precise prototype of idea
- Quick test on the market

3D printing

Investments:

- Internet
- Technology that brings data in every house

Buyers:

- Numerous possibility of courses
- Learn from home whenever you want

Online Learning Platforms

ARTTHINKING
|
DESIGN THINKING
|
PROTOTYPING
|
BUSINESS PLAN

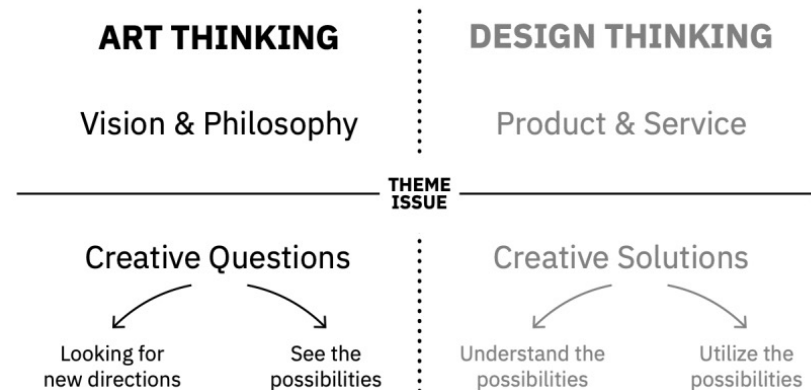
The innovation process

aRT tHINKING

Generating a wide range of ideas without judgment.

dESIGN tHINKING

Generating a business proof of an idea.



aRT tHINKING

Generating a wide range of ideas without judgment.

A lot of cars in town:

- Ordinary thinking: more slots for cars
- Art Thinking: less cars

dESIGN tHINKING

Generating a business proof of an idea.

A lot of cars in town:

- Ordinary thinking: building new car garages
- Art Thinking: building green areas instead of park slots and set up a good public transport

Business Model Canvas



Bussines plan

REGINNA^{4.0}

Thank you!

Simon.mokorel@rra-sp.si

Supported by



Funded by the
European Union



www.reginna4-0.eu