

# روندهای نوآوری و آینده ی کارآفرینی

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خرداد ۱۳۹۸

شهرکرد

# What would we do today

- Knowing each other.
- Group work instructions.
- 1- Innovation 101: let's discuss the definition and importance first.
- 2- Innovation Process in organization.
- 3- Strategies of innovation implementation.
- 4- Rogers' Curve and innovation life cycle.
- 5- How to pass the Chasm.
- 6- The Dark Side of Innovation.
- 7- The future of entrepreneurship



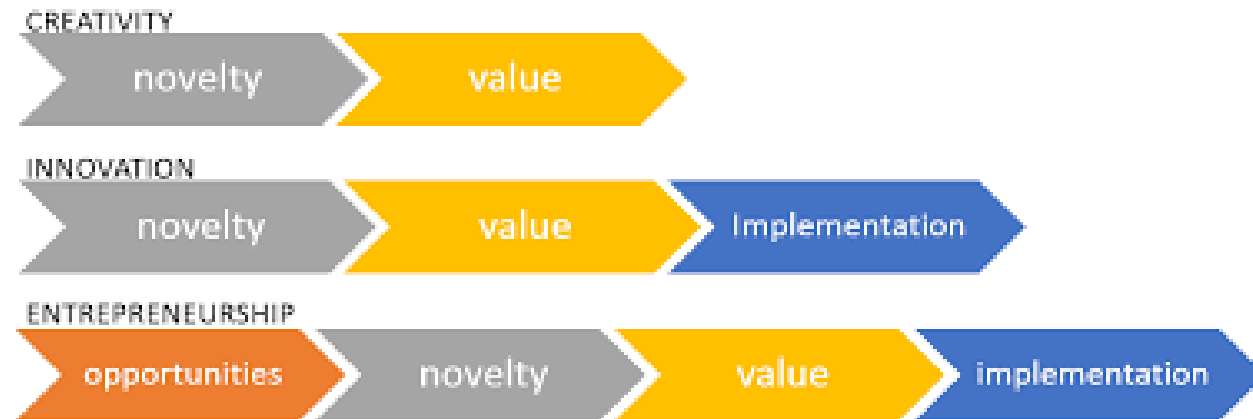
- MBA کارآفرینی دانشگاه HHL آلمان
- مدیرعامل موسسه ایران نالج تهران
- مدیر شبکه پژوهش و فناوری اصفهان
- طراح و موسس باشگاه کارآفرینی تیوان، شتابدهنده نوآوری نوتک
- کارشناس مقیم در برلین استارتاپ انکوباتور، اسپین لب و سوشال ایمپکت لب

Innovation 101: let's discuss the definition and importance first.

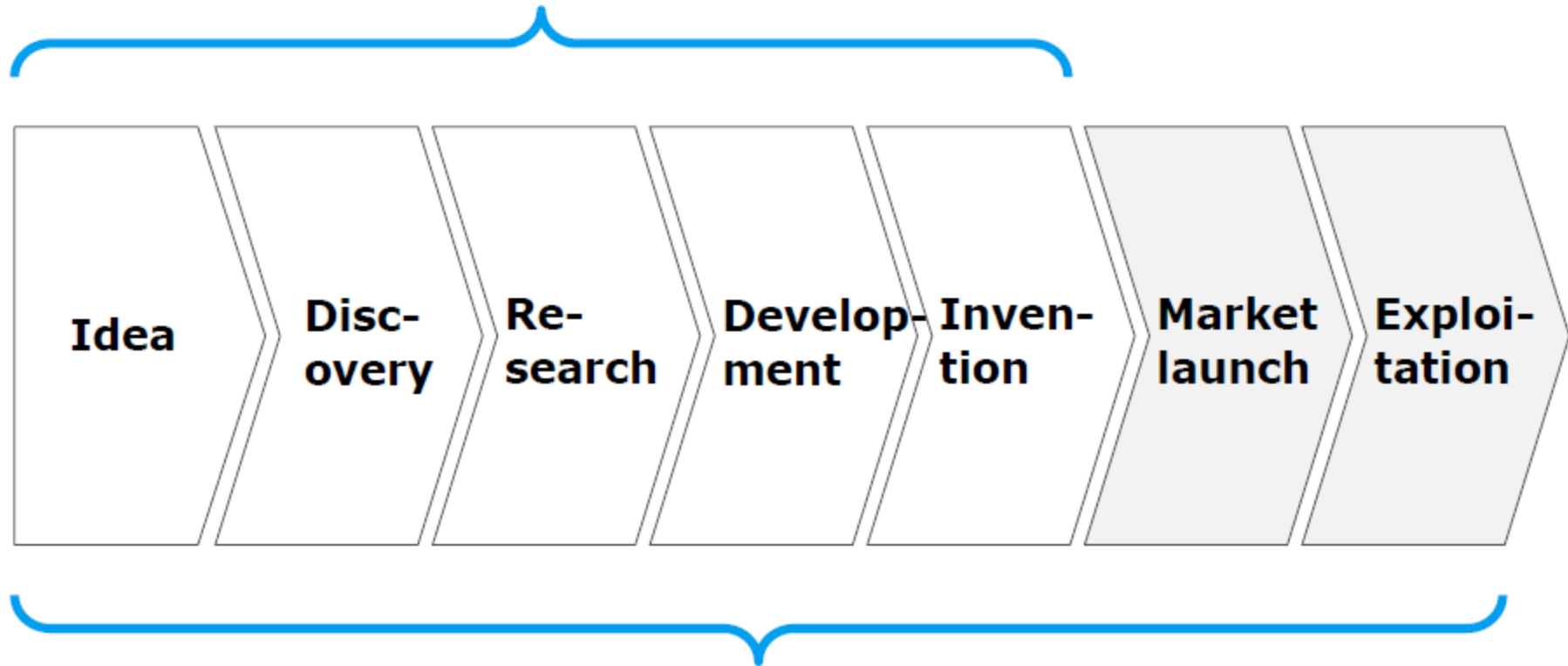
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# Innovation 101

- Why Creativity and Innovation is satisfying?
- Implementation is the key!!!

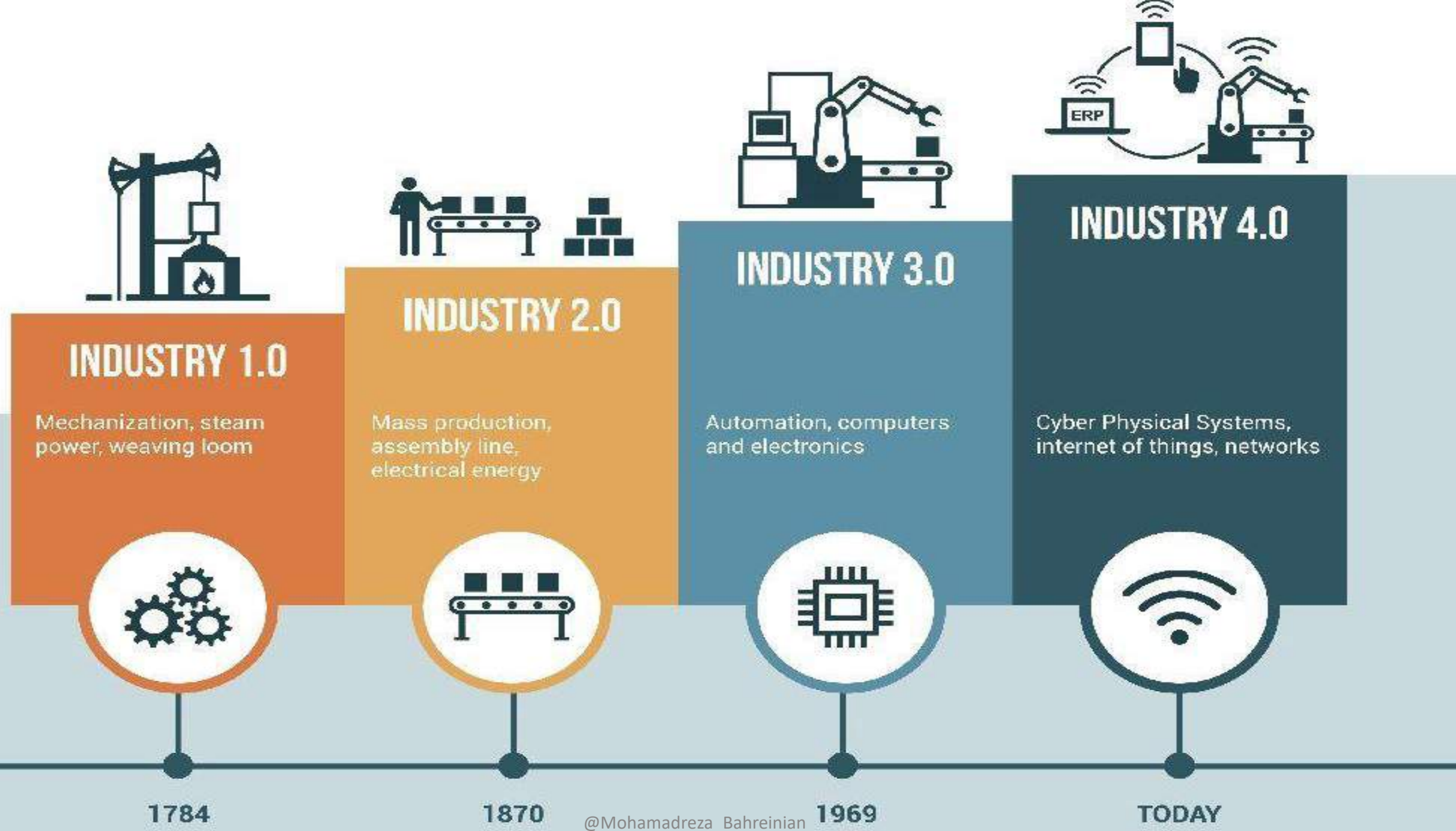


## **Invention**



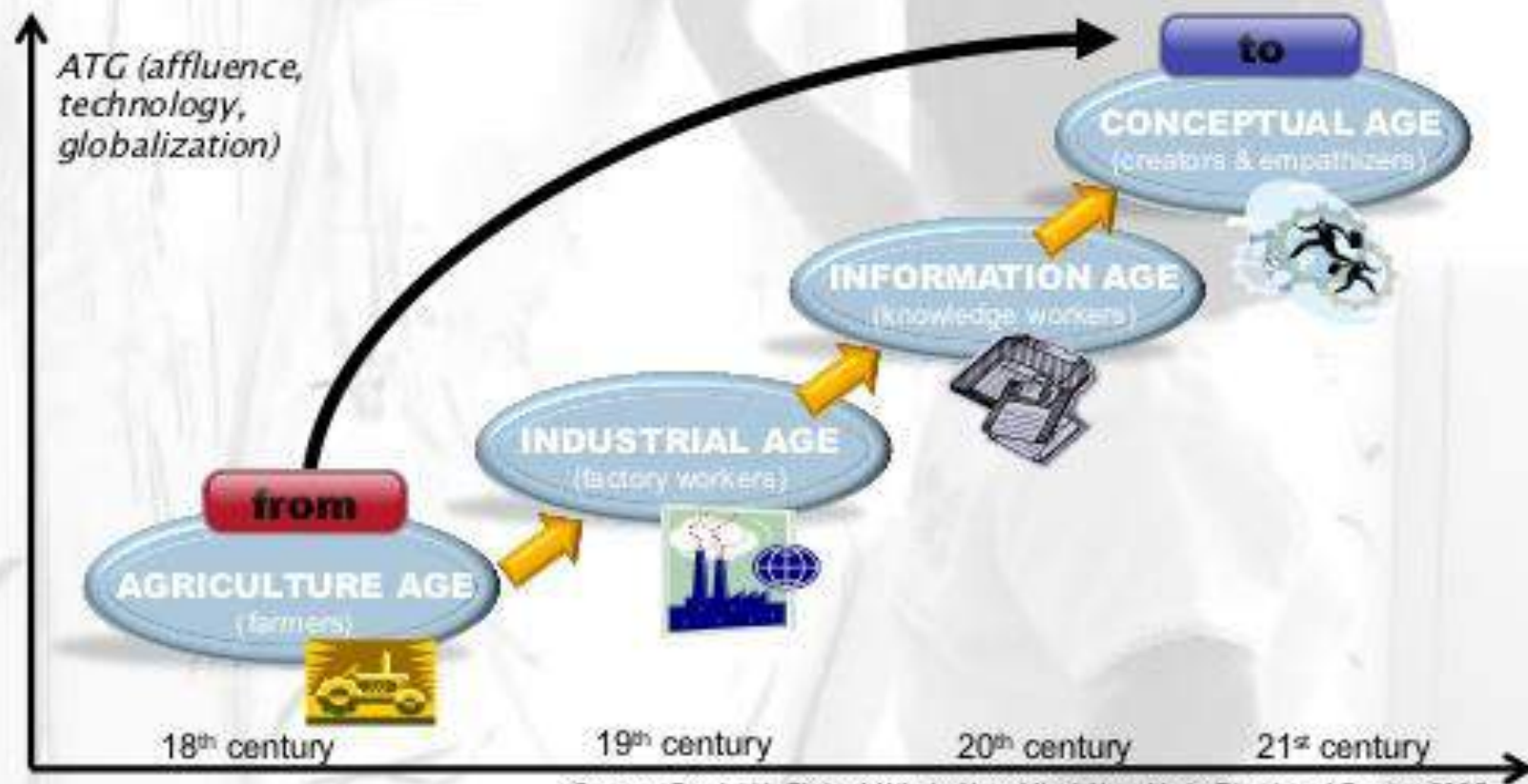
## **Innovation**

**„Innovation = Invention + Commercialisation“**



# It's a New Age.....

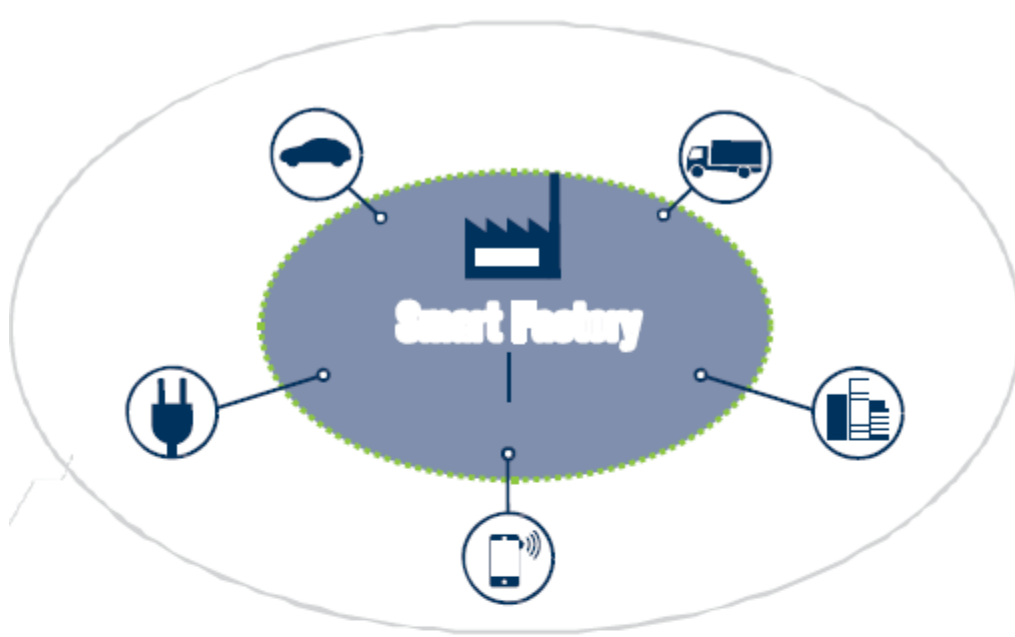
## The Upcoming Era of Conceptual Age



Source: Daniel H. Pink, *A Whole New Mind*, New York, Riverhead Books, 2005

**"The Next decade will be the Value Era- the refining & institutionalizing of the concept of value. Value isn't just money. Its intellectual capital, ideas, innovation".**





② End of 19th century to 1970s

## 2. Industrial revolution

Introduction of mass production based on the division of labor with electricity

① End of 18th century to beginning of 20th century

## 1. Industrial revolution

Introduction of mechanic production with steam- and waterpower turbines

③ End of 1960s until today

## 3. Industrial revolution

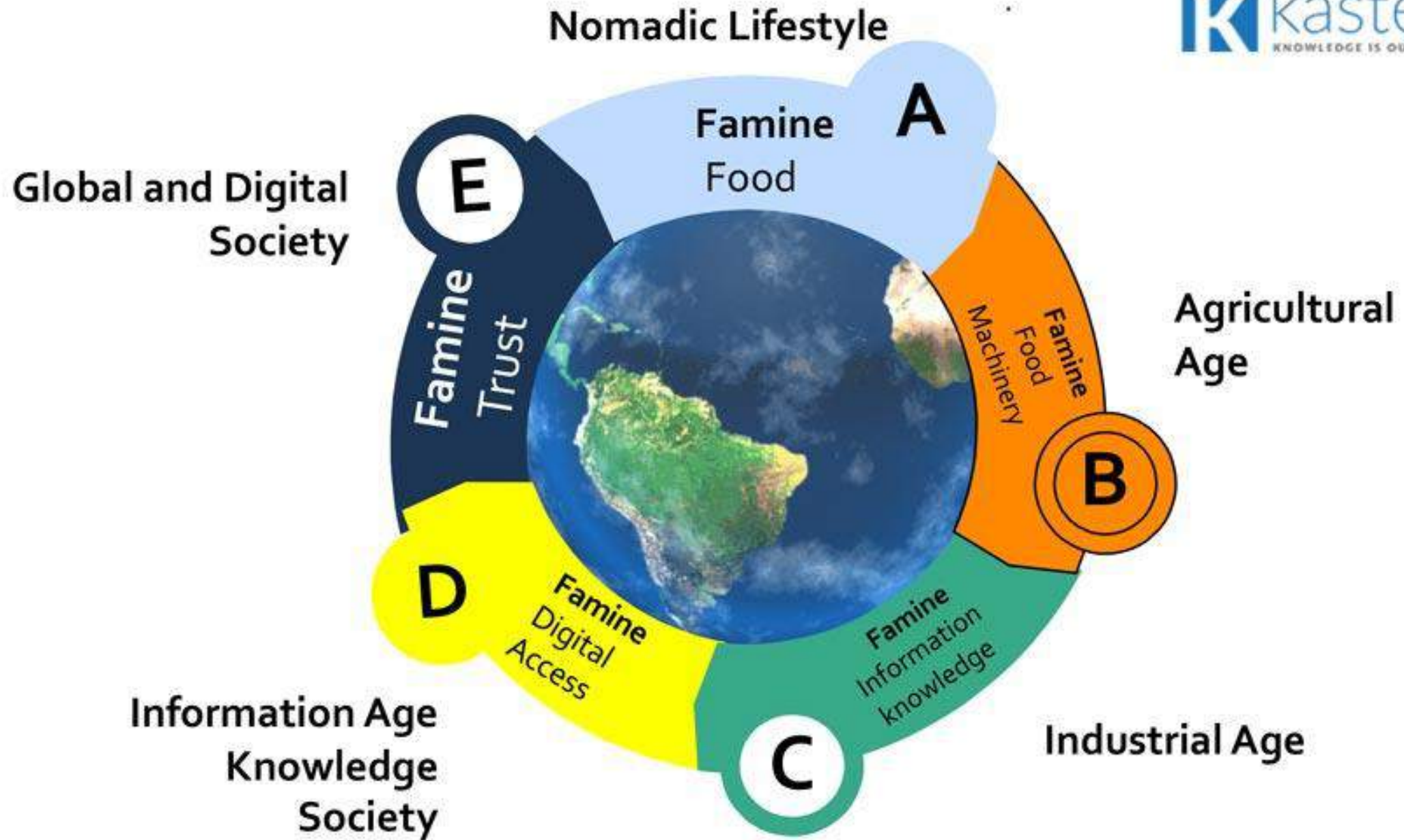
Introduction of IT and Electrical Engineering for the automation of production (SPS)

④ Beginning of 21th century up to future

## 4. Industrial revolution

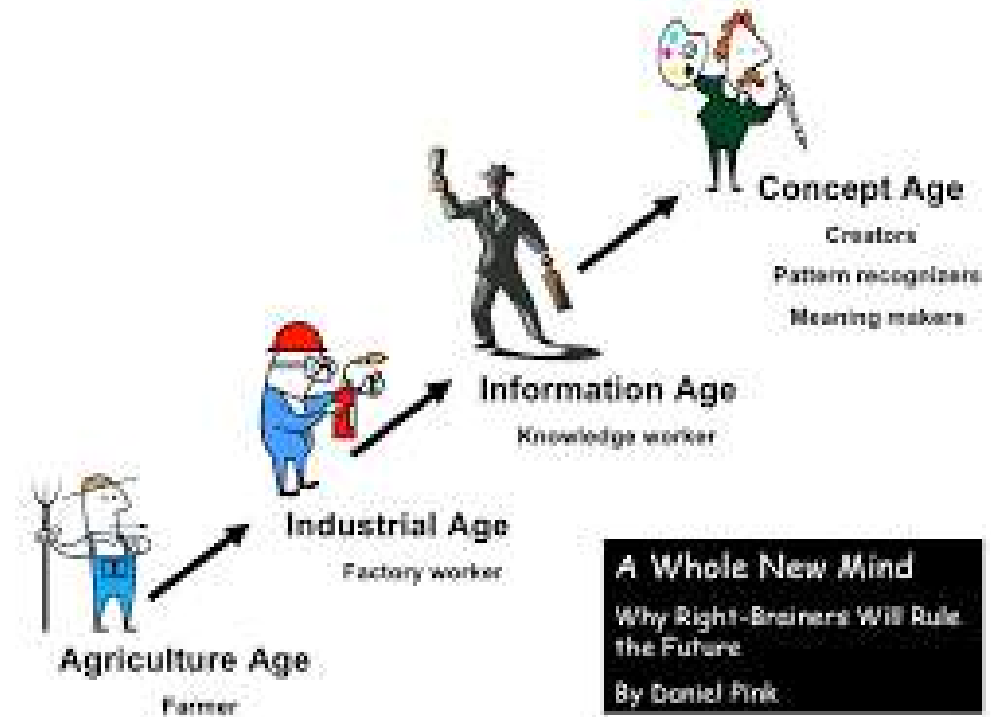
Introduction of Cyber-Physical Systems (Smart Factory 4.0)

- Development of new forms of value chain and employment due to the **internet of things and services** (*smart product, smart logistics, smart mobility, smart grid, smart factory*)
- Intelligent gadgets capture various and comprehensive data (**Big Data**) due to intelligent algorithms, which are used for innovative services



# Paradigms of the new era

- Work and life definition.
- Business type, growth and risks.
- Who is the skilled and experienced worker?
- Company definition.



## TYPES OF INNOVATION IN BUSINESS MODELS



### PROFIT MODEL

Finding new ways to convert a firm's offerings and other sources of value into cash. A good profit model understands what its customers cherish, and where new revenues and opportunities are



### VERTICAL INTEGRATION

It's an expansion strategy where a company adds business operations into different steps on the same production path. This strategy helps to reduce costs, turnaround time, transportation expenses, and improve efficiencies



### PARTNERSHIP

Taking advantage of other companies' processes, resources, technologies, offerings, and brands. The risk of the development of new offers is shared between the partners



### OPTIMIZATION

Doing more with fewer resources while generating less waste, emissions, and pollution



### CIRCULARITY

The key idea is to turn waste streams into useful and valuable inputs for other production cycles, making better use of capacity



### SUBSTITUTION WITH RENEWABLES

This innovation comes from the reduction of environmental impacts and increased business resilience by addressing resource constraints associated with non-renewable resources



### PRODUCT-ORIENTED SERVICES

Providing services instead of products that satisfy users' needs. It encourages right behaviors among manufacturers and users, and potentially reduces the need for physical goods



### CUSTOMER ENGAGEMENT

It's all about understanding the needs of customers and using inputs to develop meaningful relationships. It provides new ways to make people's lives more fulfilling



### CHANNELS

All the new ways to bring products and services to customers and end-users



### PRODUCT SYSTEM

How products and services are interrelated to create a strong and replicable system. The aim is to integrate other ways of creating valuable connections between different offerings



### FINANCING

Finding new financing instruments and payment schemes used in the development of projects

# Nine Tech Trends That Will Affect Your Life And Business

- 5G network (10 giga/s on your smartphone)
- Artificial Intelligence
- Autonomous Devices and Vehicles
- Block Chain
- Big Data and Machine Learning
- Digital Ethics and Privacy
- Smart wearables
- Cultured meat and Insect protein
- Drowns

# Choose your desired tech trend

- Choose the two you like the most.
- Do a little research, how is the trend in your country?
- What are the estimations regarding the market size, business segments, and it's growth rate?
- Make one slide about it.

# Innovation Process in organization

2

# Innovation Process in Organization

1. Internal innovation process (within a company)
2. Customer supported innovation process
3. Internal idea platform
4. External idea platform
5. Open Innovation challenge
6. Innovation project with university
7. Open source project



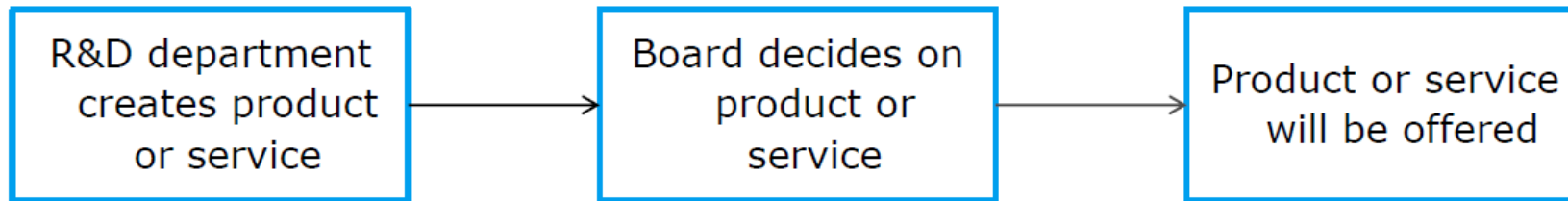
# Internal Innovation Process

## Advantages

- Maximum level of control
- Innovation would be in line with company mission

## Disadvantages

- No external feedback
- Process is very expensive



# Internal Innovation Process



Research at Google tackles the most challenging problems in Computer Science and related fields. Being bold and taking risks is essential to what we do, and research teams are embedded throughout Google allowing our discoveries to affect billions of users each day.

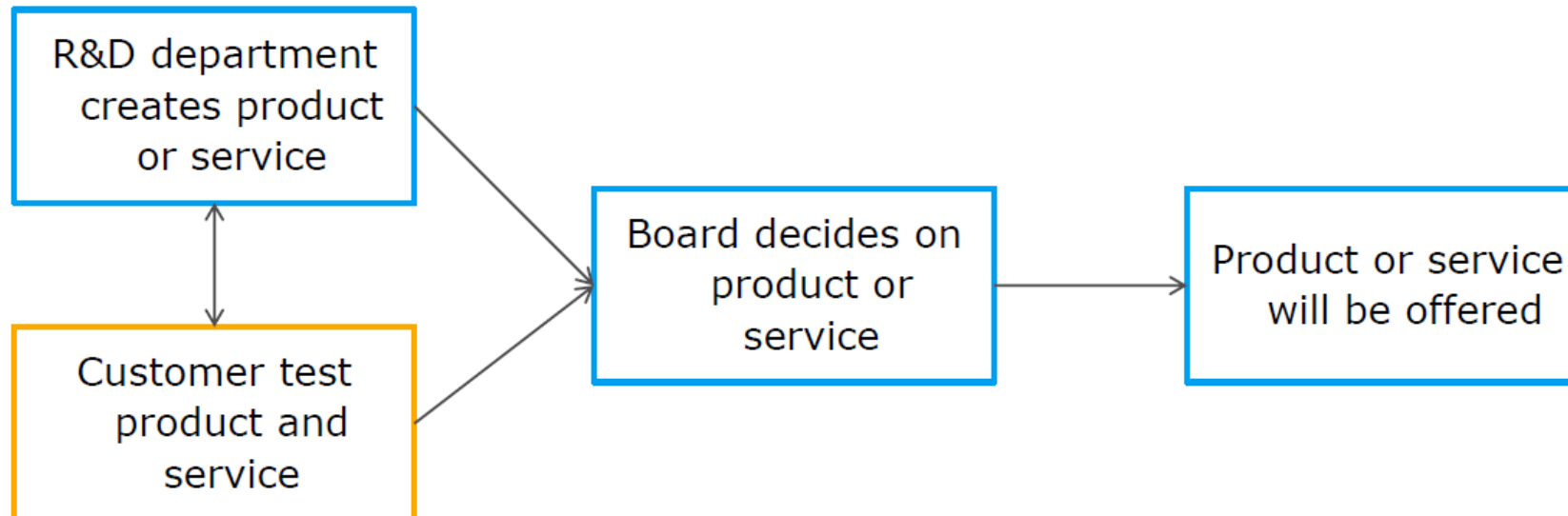
# Customer supported innovation process

## Advantages

- Innovations which customer directly need

## Disadvantages

- Possibly no radical innovation
- Innovations might not be necessarily beneficial for company



# Customer supported innovation process



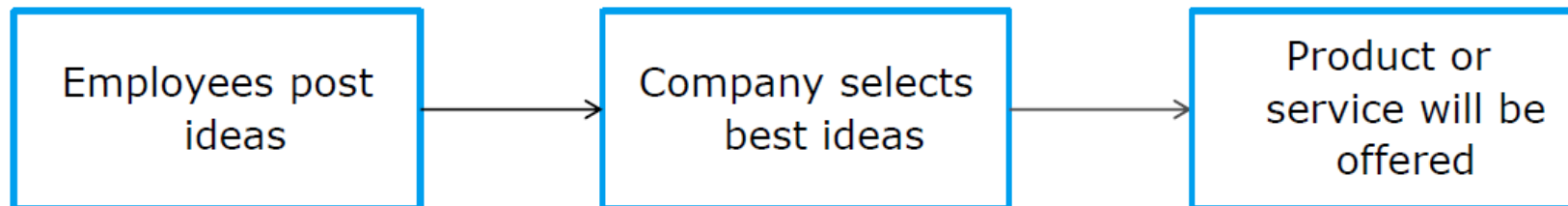
# Internal idea platform

## Advantages

- Employees often know best about the product or service

## Disadvantages

- No external feedback
- Often, you have to incentivize employees to take part



# Internal idea platform



## **Discuss**

Initiate Engagement



## **Solve**

Solve a Specific Problem



## **Optimize**

Improve a Business Area



## **Hack**

Build Prototypes



## **Incubate**

Develop Opportunities



## **Pitch**

Run Internal Shark Tanks



## **Monitor**

Track Evolving Trends  
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## **Understand**

Facilitate Design Research



## **Suggest**

Consider Any Idea



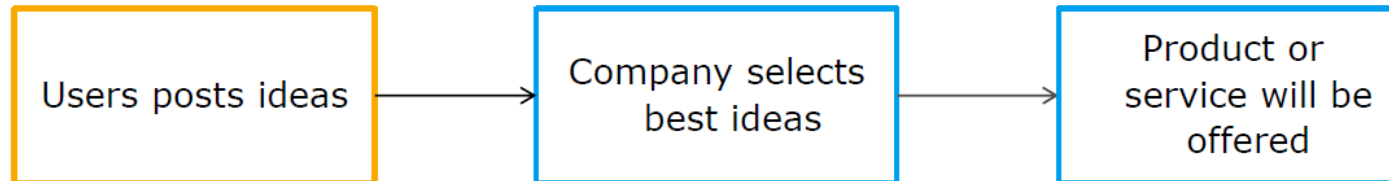
# External idea platform

## Advantages

- Get outside feedback and ideas

## Disadvantages

- Your competitors know what you are working on



# External idea platform

ریورس پیچ اینوتکس

**INOTEX** Reverse Pitch

از سری رویدادهای نمایشگاه نوآوری و فناوری



رفع نیازهای فناورانه سازمان ها و شرکت ها

شناسایی عرضه کنندگان توانمند در حوزه های فناوری نوین

ارتباط عرضه کنندگان فناوری در اینوتکس با کارفرمایان هوشمند

**INOTEX**

THE NATIONAL INNOVATION & TECHNOLOGY EXHIBITION 2018

مفتمین نمایشگاه بین‌المللی نوآوری و فناوری

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۱۶ تیر ماه ۹۷

July 7, 2018

سالن همایش (شماره ۱۵۶)

Conference Hall (No.156)

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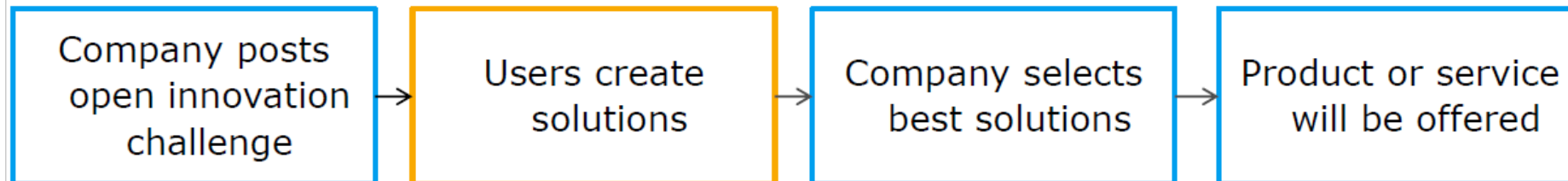
# Open innovation challenge

## Advantages

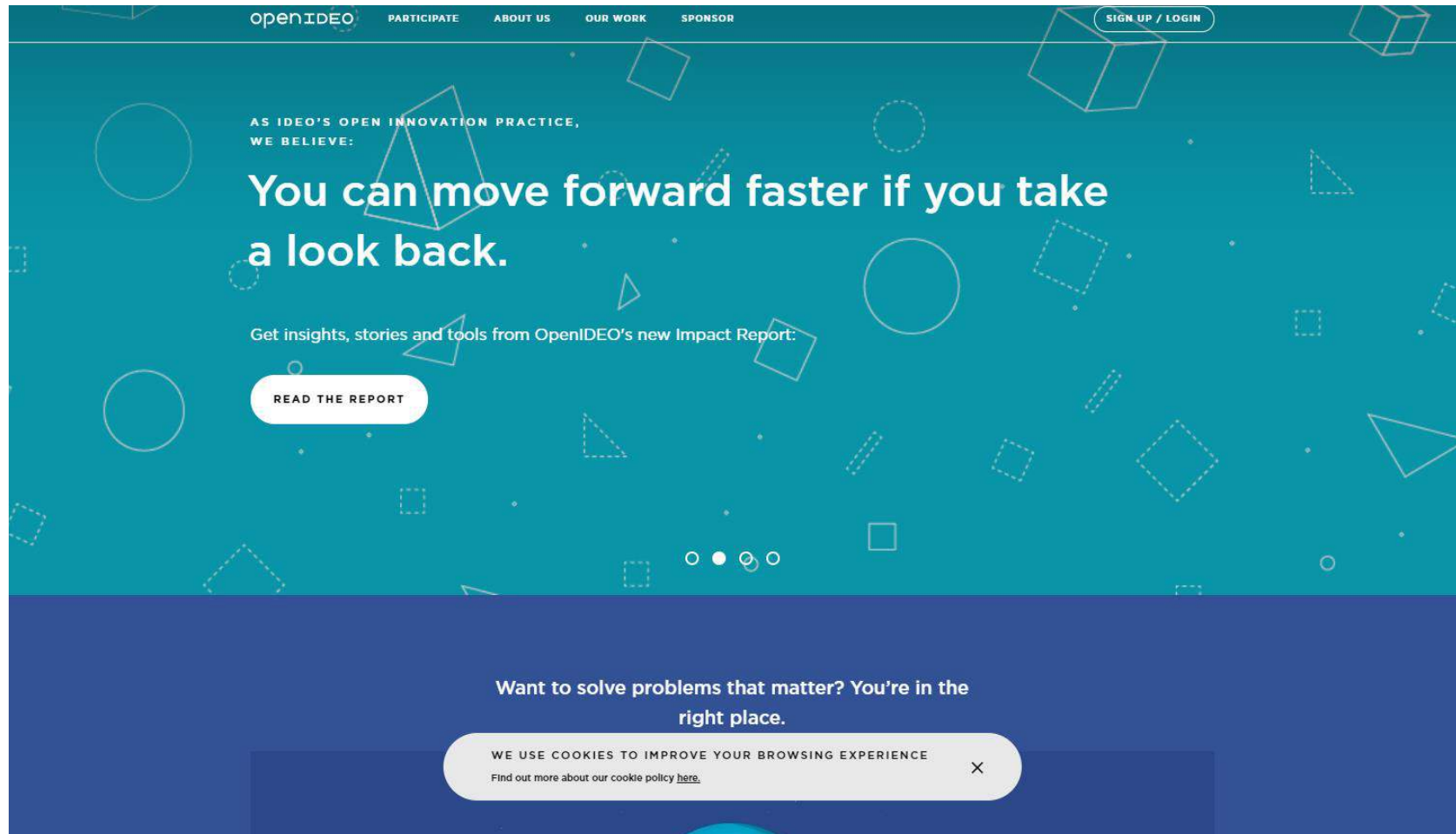
- Users create the solutions
- Access to a high level of creativity

## Disadvantages

- No control over the ideas
- Other companies can also see the ideas



# Open innovation challenge



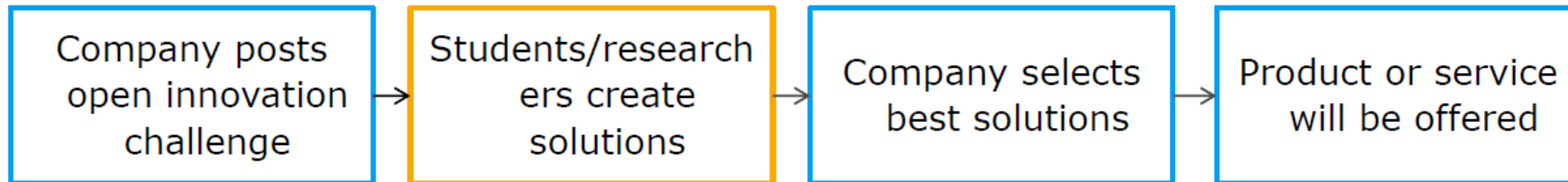
# Innovation projects with RnD centres, Universities,...

## Advantages

- Access to highly qualified people
- Access to most current scientific knowledge

## Disadvantages

- Students/researchers often lack the knowledge to assess the feasibility



# Innovation projects with RnD centres, Universities,...



Die Teams „Porsche XCube“ und „FinTec“ sind die glücklichen Gewinner des Innovationswettbewerbs und freuen sich über jeweils 5000 Euro Preisgeld.

Foto: Dirk Knöfe

## Innovation made in Leipzig

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# Choose your best innovation process

- Why it is the best for your chosen trend?
- What are the positive and negative sides of your chosen innovation process?

# Strategies of innovation implementation

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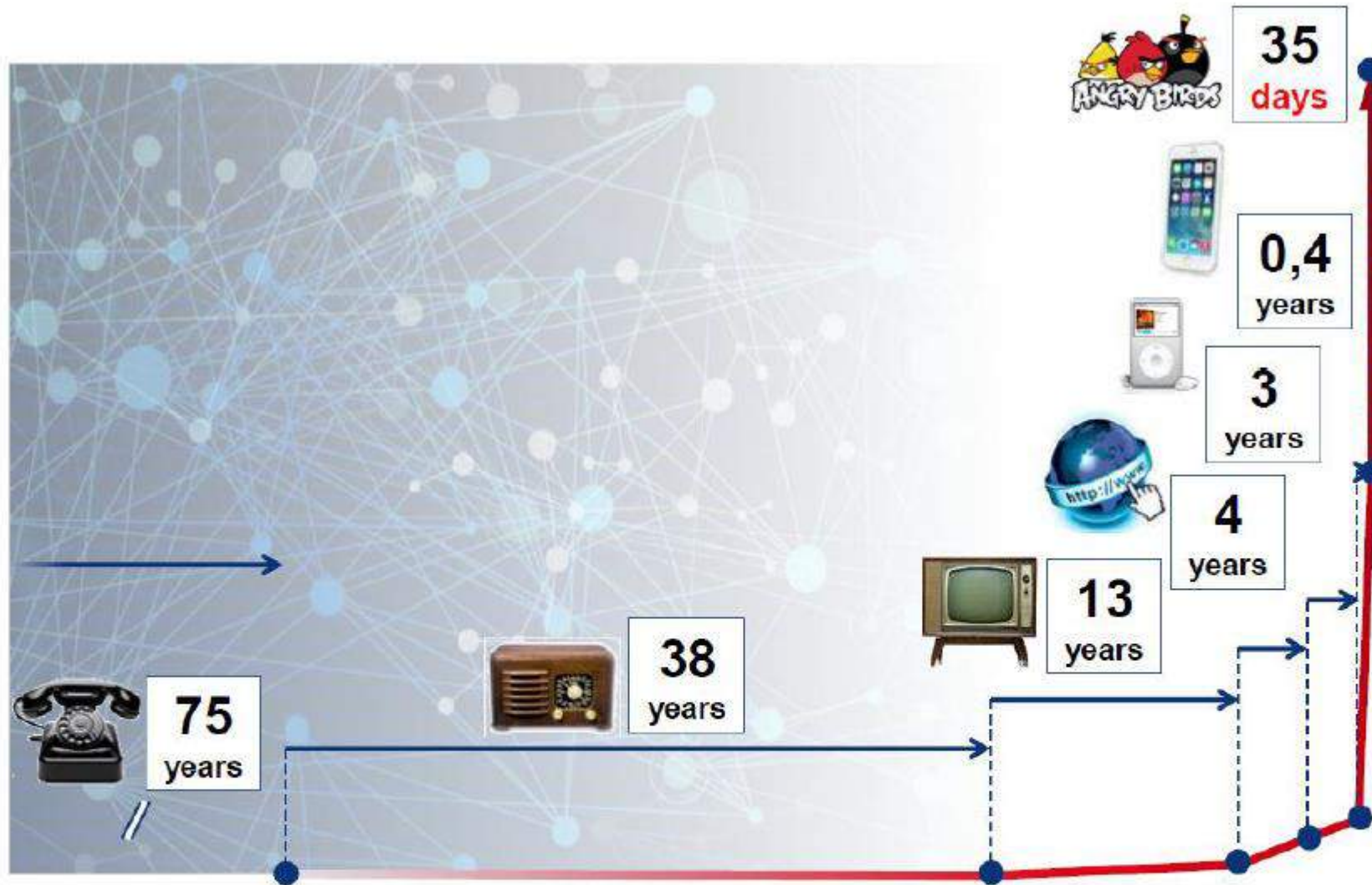
# Strategies of innovation implementation

1. Independent company/ start-up
2. Corporate Venturing
3. Company Spin-off
4. University Spin-off
5. Strategic alliance
6. Product/service by a cooperation
7. Governmental implementation

# Rogers' Curve and innovation life cycle

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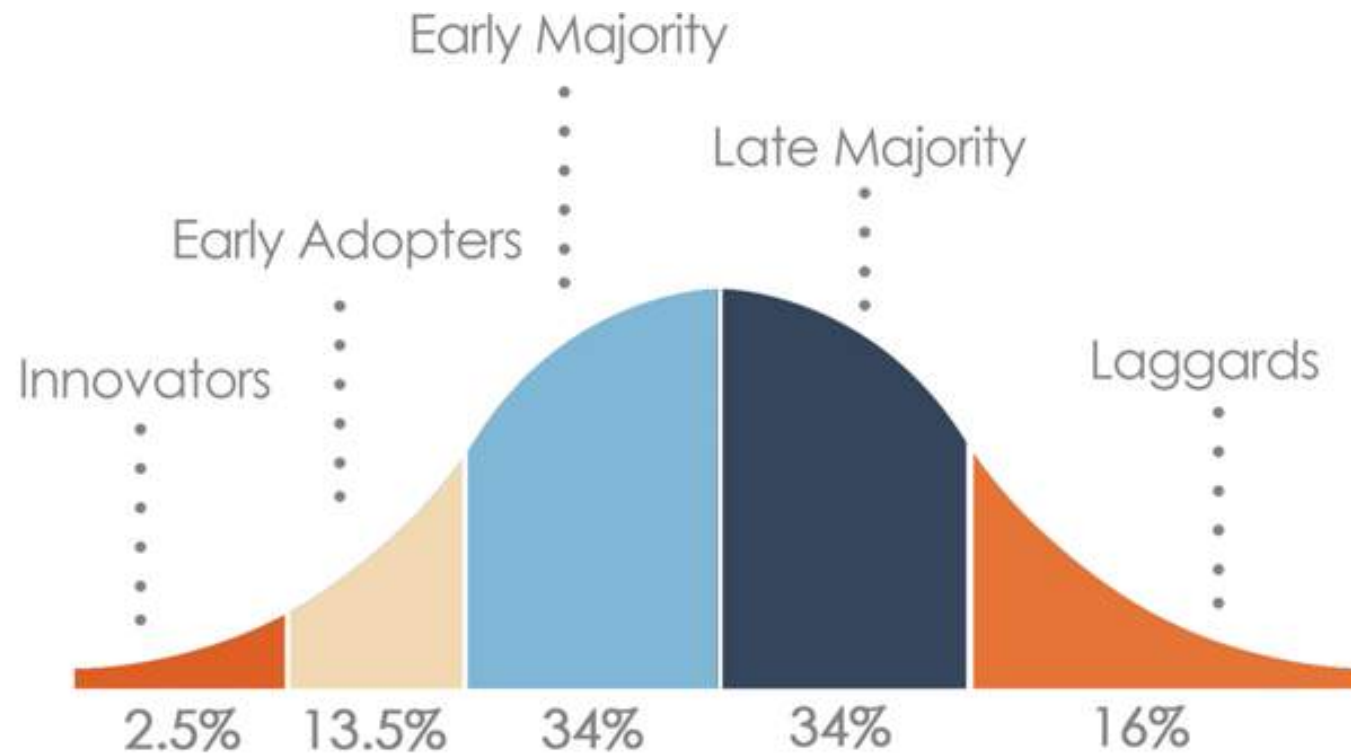




Source: Deutsche Postbank, Lecture slides

**The time to get 50 million users reduced from 75 years to 35 days.  
Any innovation can be the leading technology within one month.**

# Roger's innovation diffusion curve

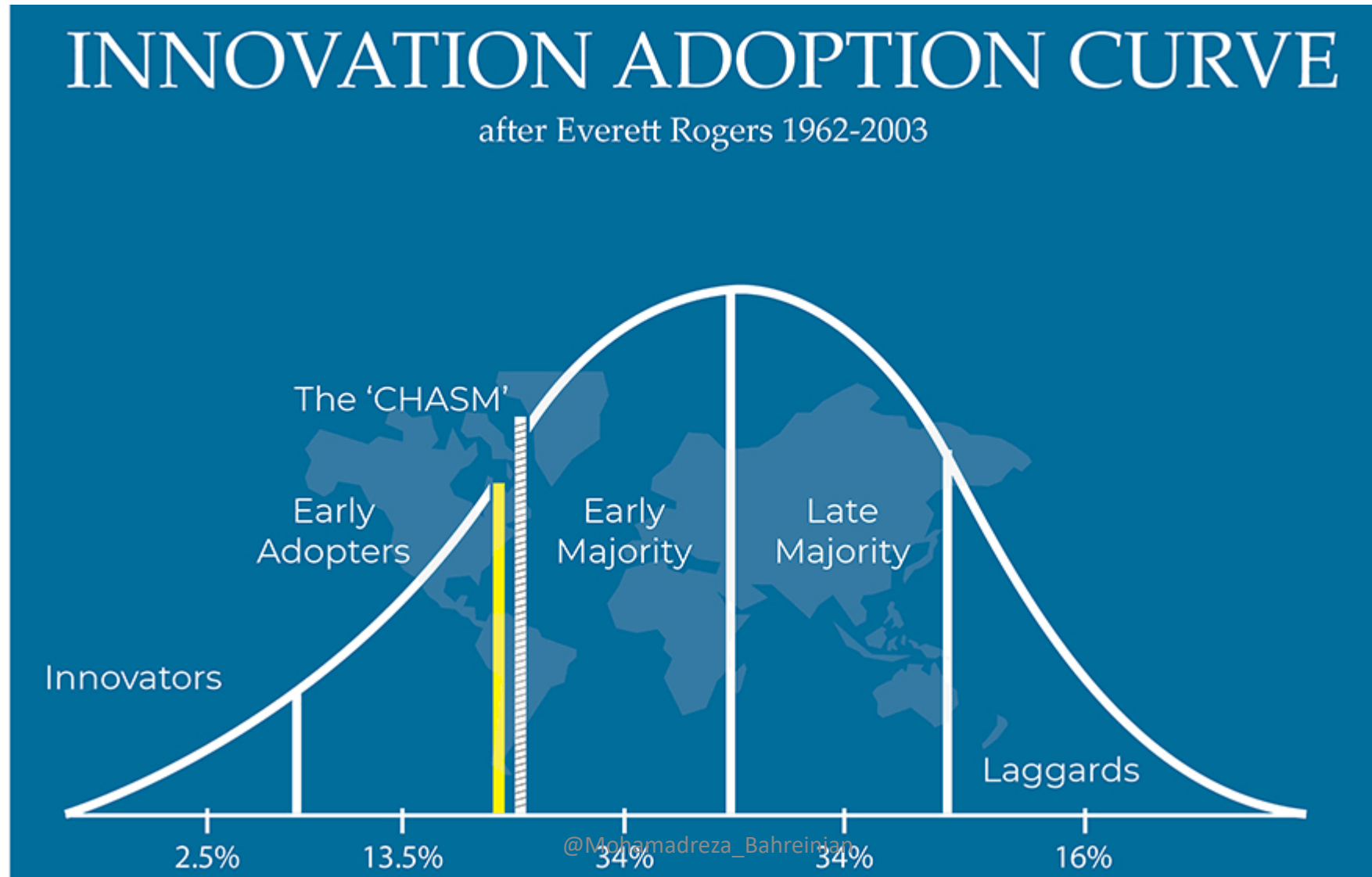


Rogers Diffusion Of Innovation Bell

# Rogers' bell curve



# Innovation adoption and the chasm



# Define your tech curve

- Who are your innovators?
- Who are your pioneer users? What is their persona?

# How to pass the Chasm

5



# How to pass the CHASM?

- Heavy marketing
- Governmental subsidy
- Creating necessary infrastructure
- Making a freemium-model
- Distributing the innovation for free

# Heavy Marketing

