



**Hanzehogeschool
Groningen**
University of Applied Sciences

Serendipity in innovation

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**share your talent.
move the world.**

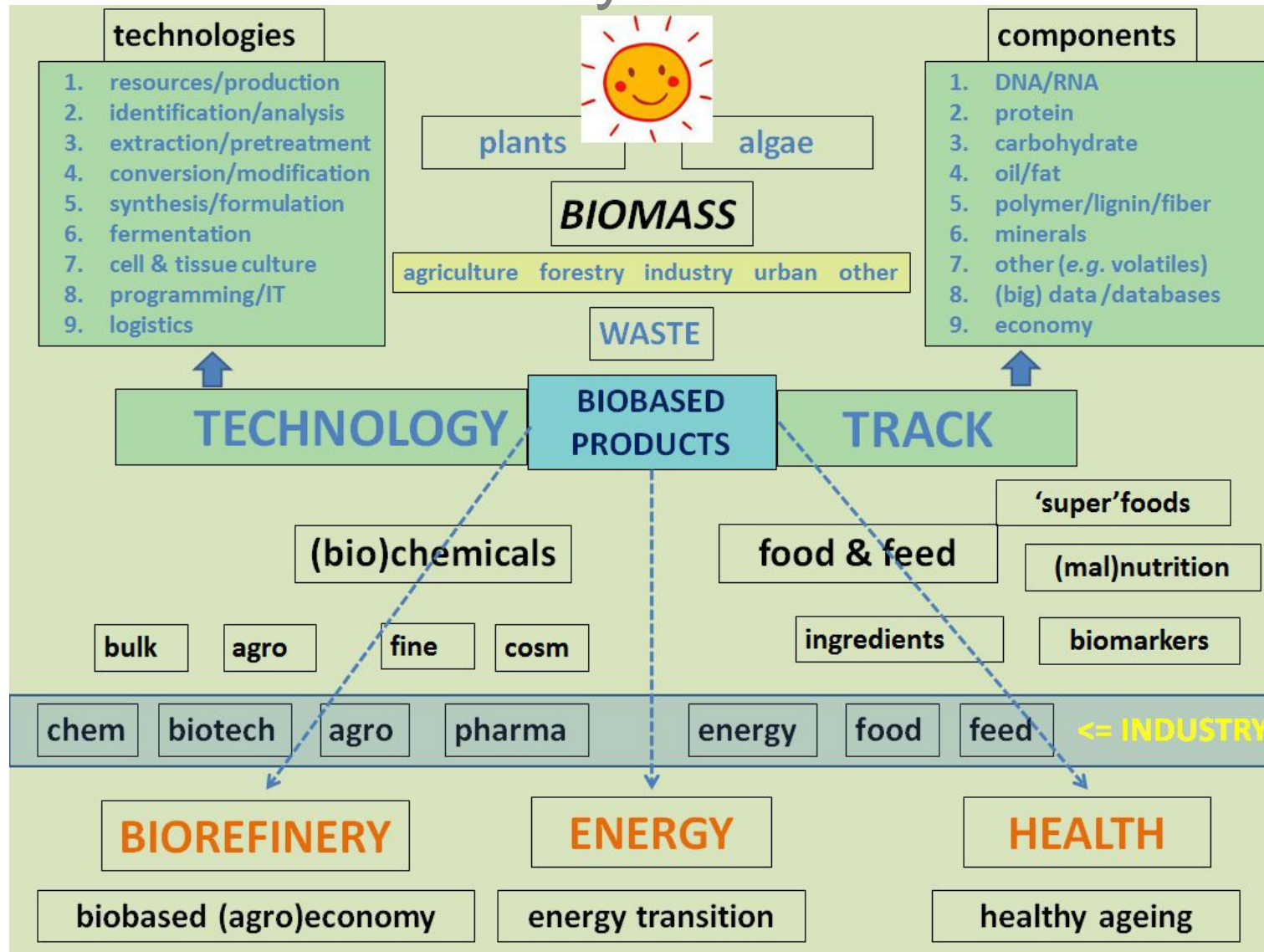
Hanze University of Applied Sciences

- Hanze University of Applied Sciences, Groningen was founded in **1798**.
- Largest University of Applied Sciences offering over **70 Bachelor's degree programmes** and **14 Master's degree programmes**.
- **17** schools, each with its own specific ambiance.
- Over **27.000** students have chosen to study at Hanze UAS.
- The university employs **2,900** professionals.
- A large **international network**.
- Strategic themes are Energy, Healthy Ageing, Entrepreneurship and Excellence.

Hanze University of Applied Sciences

- **Six centres of Applied Research and Innovation**
 1. Centre of Applied Research and Innovation – Energy
 2. Centre of Applied Labour Market Research and Innovation
 3. Centre of Applied Research and Innovation – CaRES (Care Rehabilitation Education & Sport)
 4. Centre of Applied Research and Innovation for NoorderRuimte Area Development
 5. Centre of Applied Research and Innovation – Art & Society
 6. Centre of Applied Research and Innovation - Entrepreneurship
- In 2016 a centre of Applied Research and Innovation – **BioBased Economy** will be initiate

Center of Applied research & Innovation- BioBased Economy



FOCAL AREAS

1. Omics technology

- DNA & RNA
- enzymes
- organisms
- conversions

2. Analytical methods & equipment

- carbohydrates
- protein
- IT infra
- other

3. Pretreatment

- efficiency
- environment
- bioprocessing
- quality control

4. Upscaling

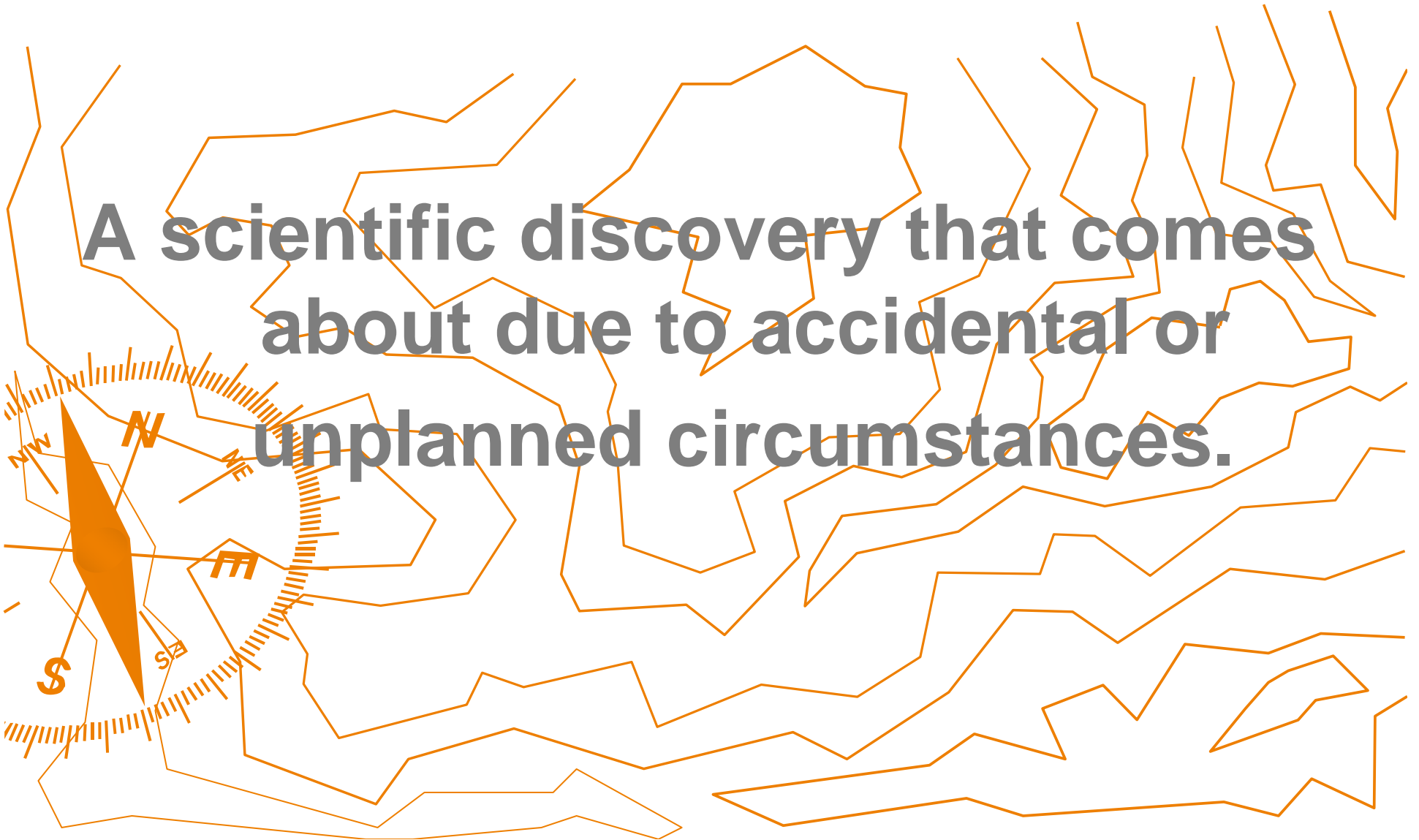
- separation
- characterization
- purification
- application

5. Feasibility

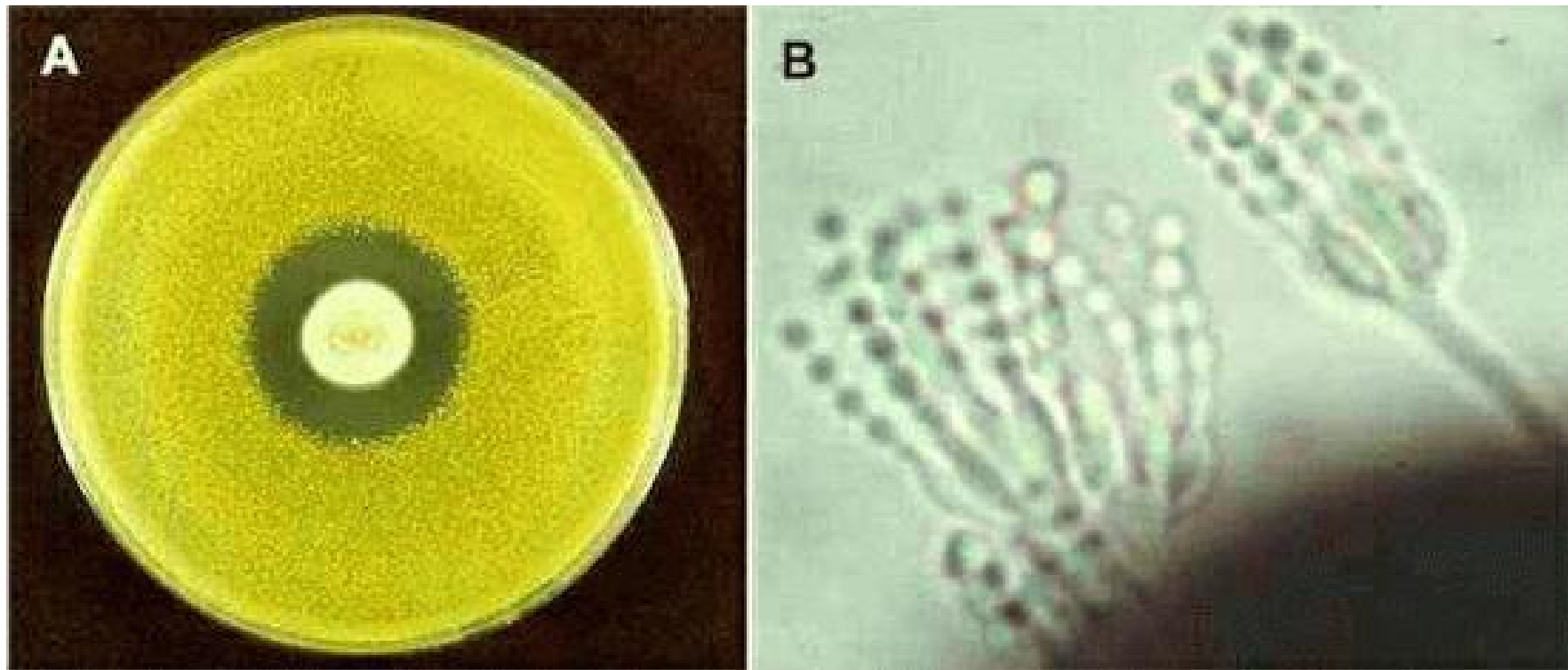
- economy/demand
- logistics
- acceptance

Serendipity

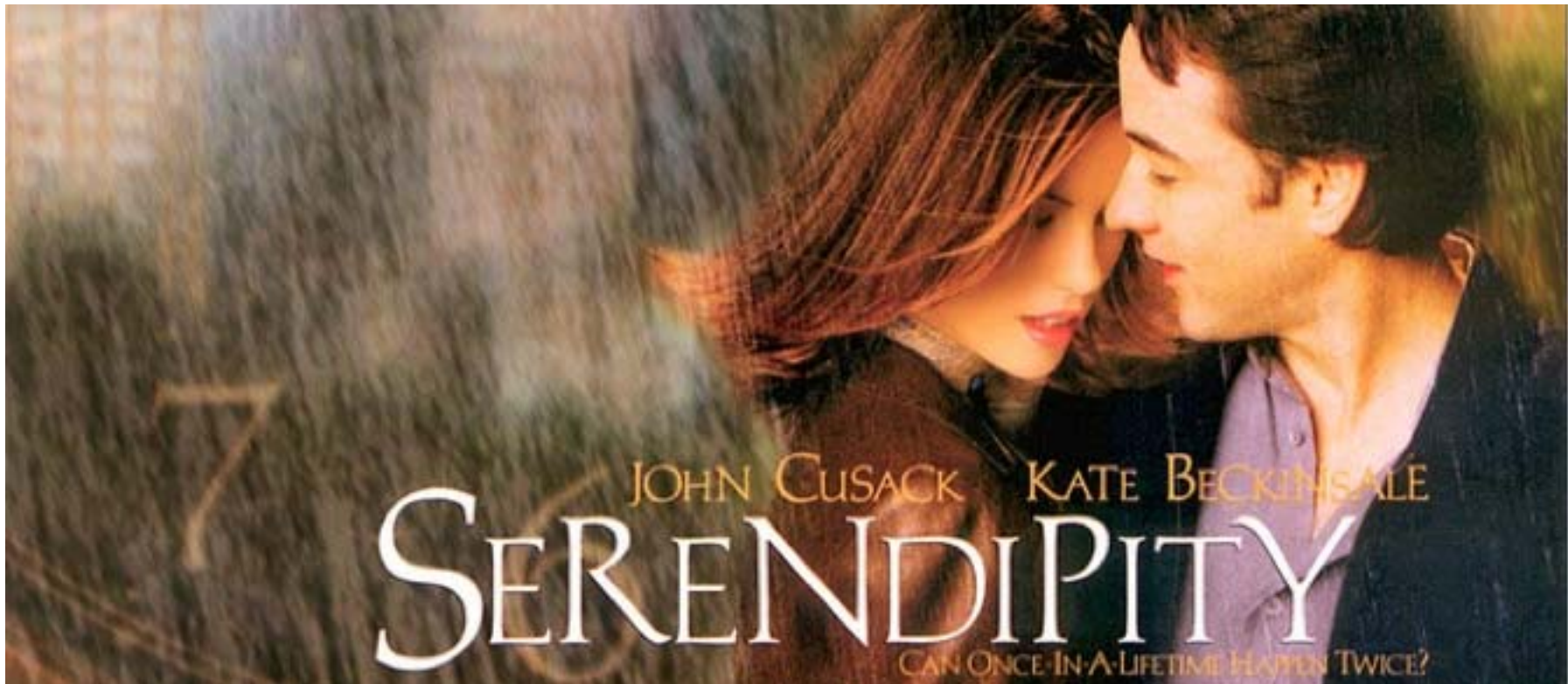
A scientific discovery that comes about due to accidental or unplanned circumstances.



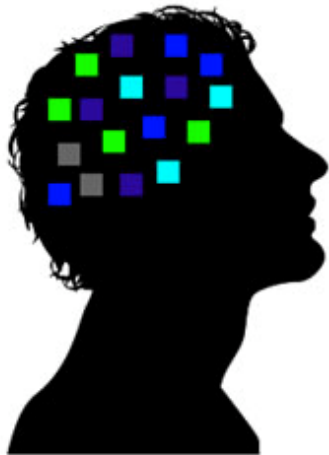
Alexander Fleming and Penicillin



Serendipity the secret lover of all scientists and innovators



HOW SERENDIPITY WORKS



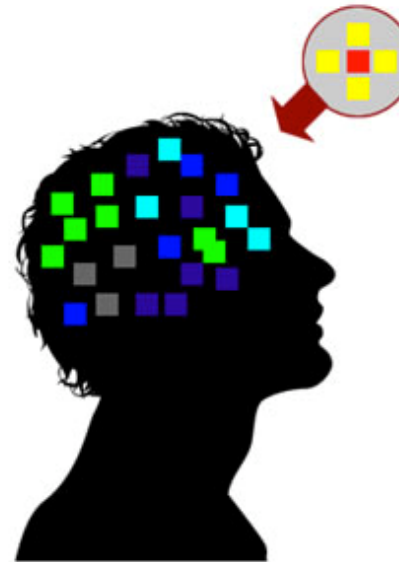
STEP 1

Fill your mind with knowledge and information about the problem you're trying to solve. This will be the "raw material" for your ideation process.



STEP 2

Your subconscious tries out different combinations of thoughts, based on the "raw material" you fed it.



STEP 3

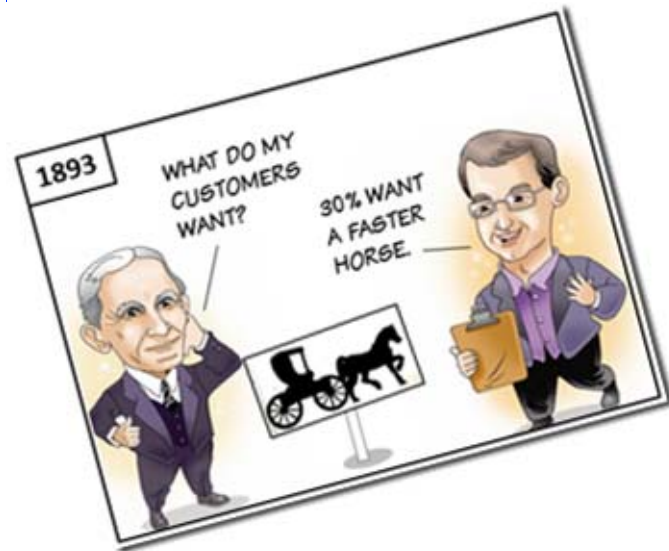
Serendipity strikes, in the form of some random external stimuli - an input that you can use to solve your challenge.



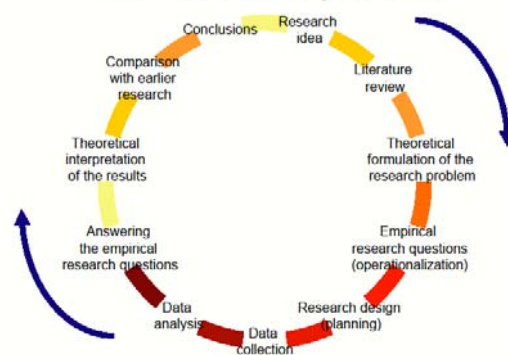
STEP 4

Your brain formulates a valuable idea, based upon parts of the knowledge you fed it earlier plus the serendipitous stimuli

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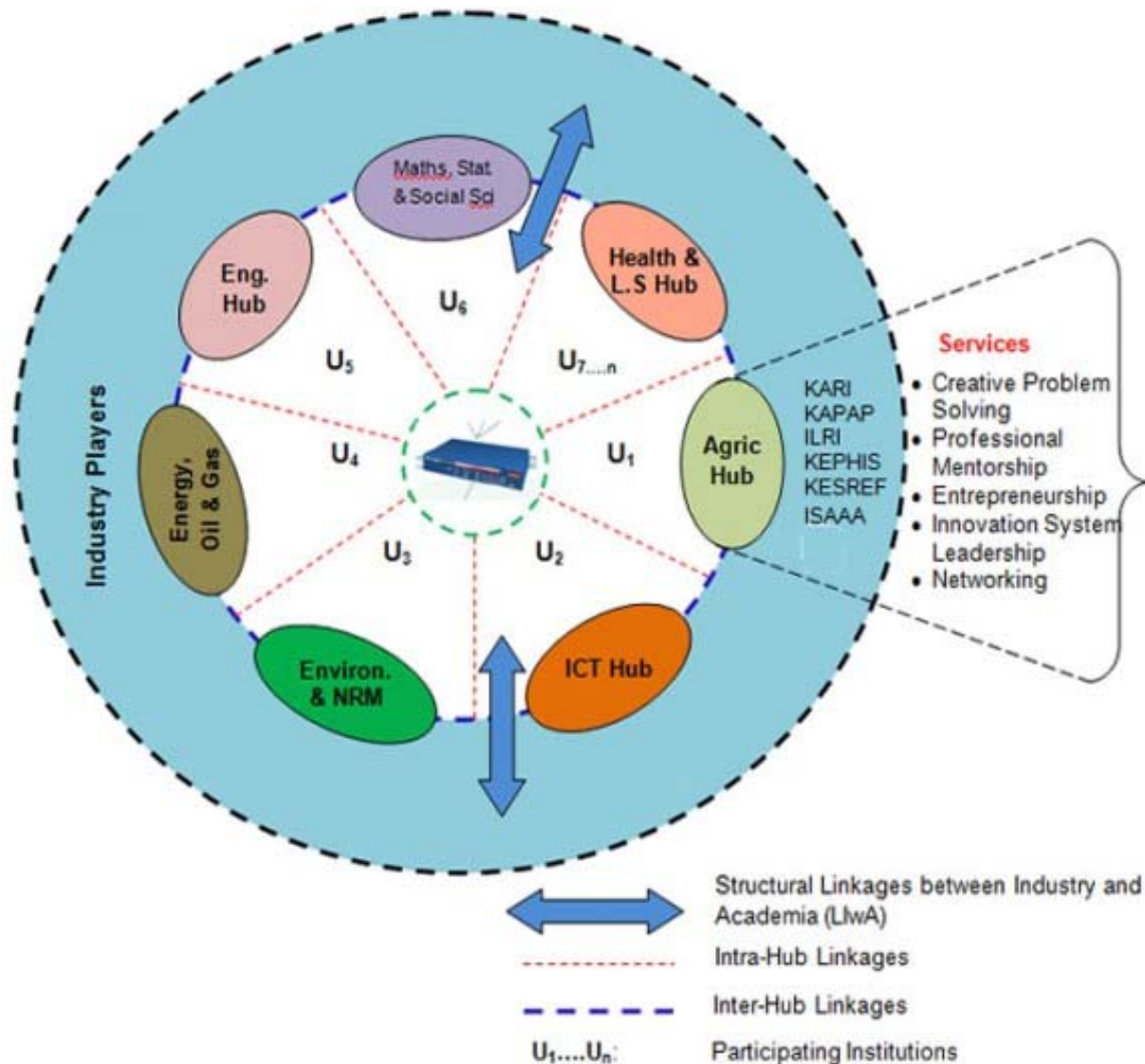


The research process



"This really is an innovative approach, but I'm afraid we can't consider it. It's never been done before."

How do we get there?



"need to know"
information



"nice to know"
information





*There are times in our lives it feels
like failure. It seems as if we are
falling but we really are flying...*

*Have faith..
Trust the process..*

-April Peerless-

Serendipity waits as a secret lover in the corner of your eye

we cannot solve
our problems with
the same thinking
we used when
we created them

~ Albert Einstein

