



Science For A Better Life



Innovation@Bayer

Mentalidad y Cultura de Innovación – Comité Universidad Empresas Estado de Santander

January 2018

Before starting...

1



Take your phone

2



Go to:
www.menti.com

3



Please enter the code

Submit

The code is found on the screen in front of you

Enter the code:
68 30 59

Our Mission

Bayer: Science For A Better Life



Our Business Areas



Pharmaceuticals

- Prescription drugs



Consumer Health

- Over-the-counter medicines, dietary supplements, dermatology products, foot care and sunscreen



Crop Science

- Innovative crop protection and seeds
- Animal Health

Our Products

Bayer: Science For A Better Life



Science For A Better Life

AGRICULTURE

- Protecting against fungal infestation
- Controlling nematodes
- Reducing pest infestation
- Protecting against weeds
- Seed with improved properties
- Protecting companion animals from infections and parasites
- Protecting and treating farm animals

HUMAN HEALTH

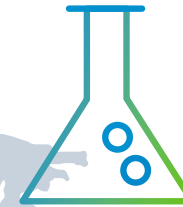
- Various types of cancer
- Myocardial infarction, stroke, pulmonary hypertension
- Contraception and menopause disorders
- Hemophilia A
- Pain, inflammation, fever
- Multiple sclerosis
- Vitamins and dietary supplements
- Eye ailments
- Burn protection and wound care



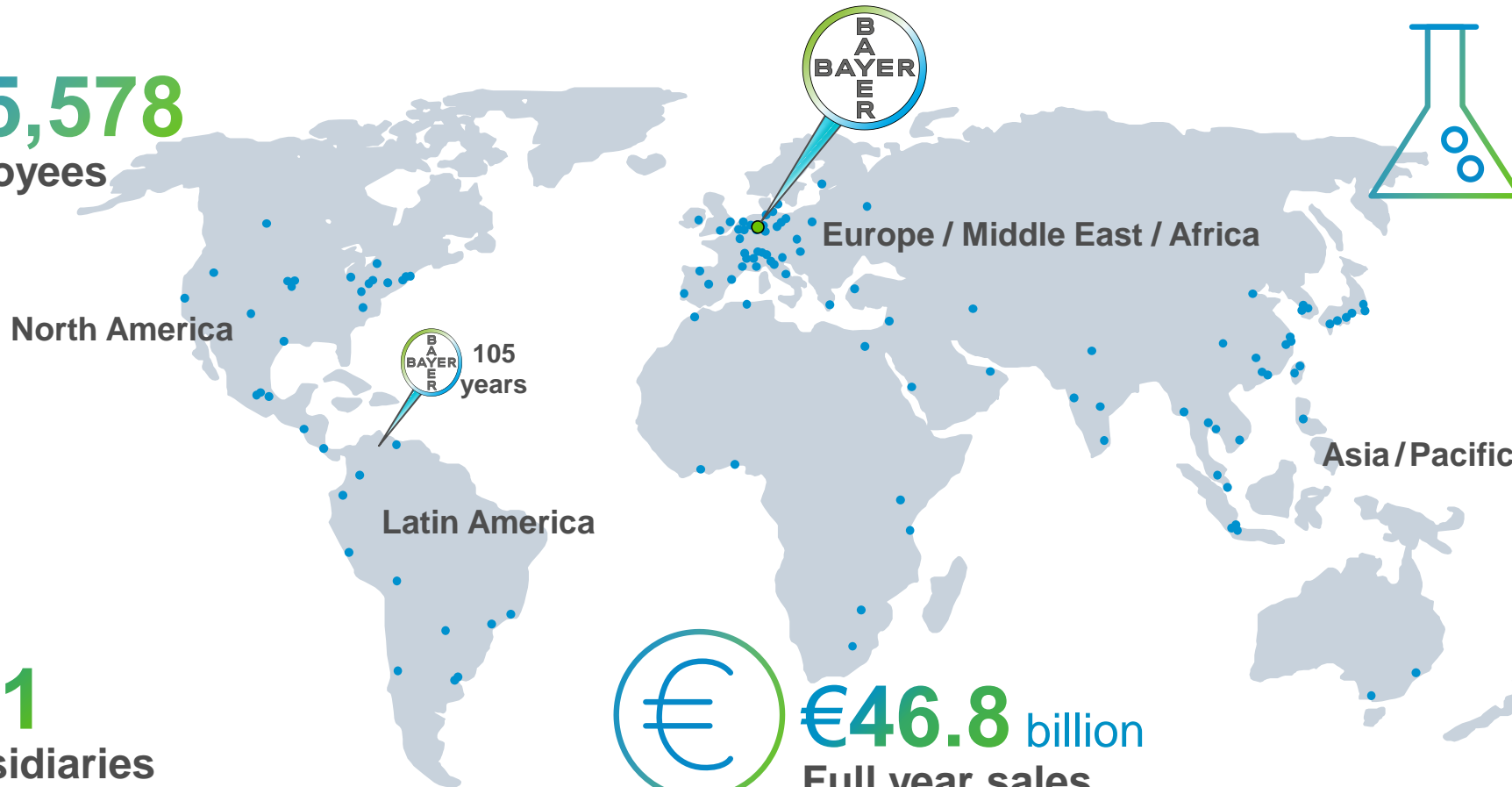
Key Locations / Regions



115,578
Employees



€4.7 billion
R&D expenses



301
Subsidiaries



€46.8 billion
Full year sales

The Bayer Group is a global enterprise with companies in 78 countries.

INNOVATION @ BAYER



What is Innovation for Bayer? **Something NEW creating VALUE**

- ▶ Innovation is owned by everyone
- ▶ We innovate in what we do

SCIENCE FOR A BETTER LIFE!

Research & Development

PHARMACEUTICALS

Clinical Trials 2016

- Investment:
+ COP \$16,000 Mio
- Partnership with **84**
Research Centers
- **10** cities



CROP SCIENCE

La Tupia: Experimental Center for tropical Crops (Valle del Cauca)

- Investment:
+ COP \$4,000 Mio
- 35 years = **150** annual tests
- The only global company with an Experimental Center in Colombia.



105 years of Life Sciences in Colombia



CROP SCIENCE

Barranquilla Plant



- **2nd largest** plant in Latin America with the latest technology
- Exports to **26** countries
- Investment:
COP \$7,000 Mio
constant improvements in production lines and physical infrastructure

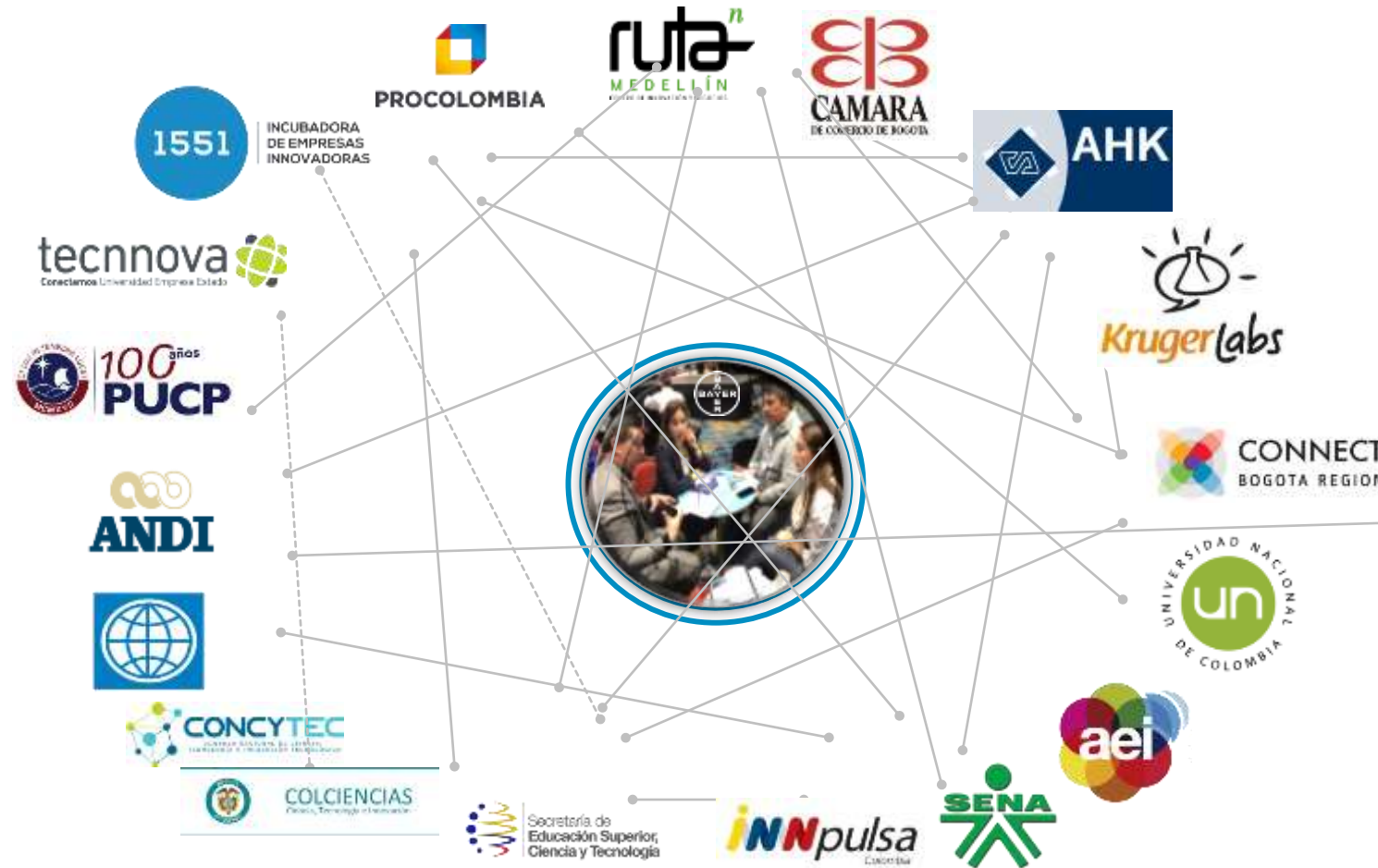
CROP SCIENCE

Colombo-German Science & Technology Foundation



- Supports transfer of applied technical knowledge, strengthening competitiveness
- Colombia: founding member
- Scholarships and short term assignments for technical experts, technologists and researchers

Network of +70 institutions from the innovation and entrepreneurship ecosystem in Colombia



In Bayer we need all types of innovation to maximize our portfolio and embrace new territory



INCREMENTAL INNOVATION

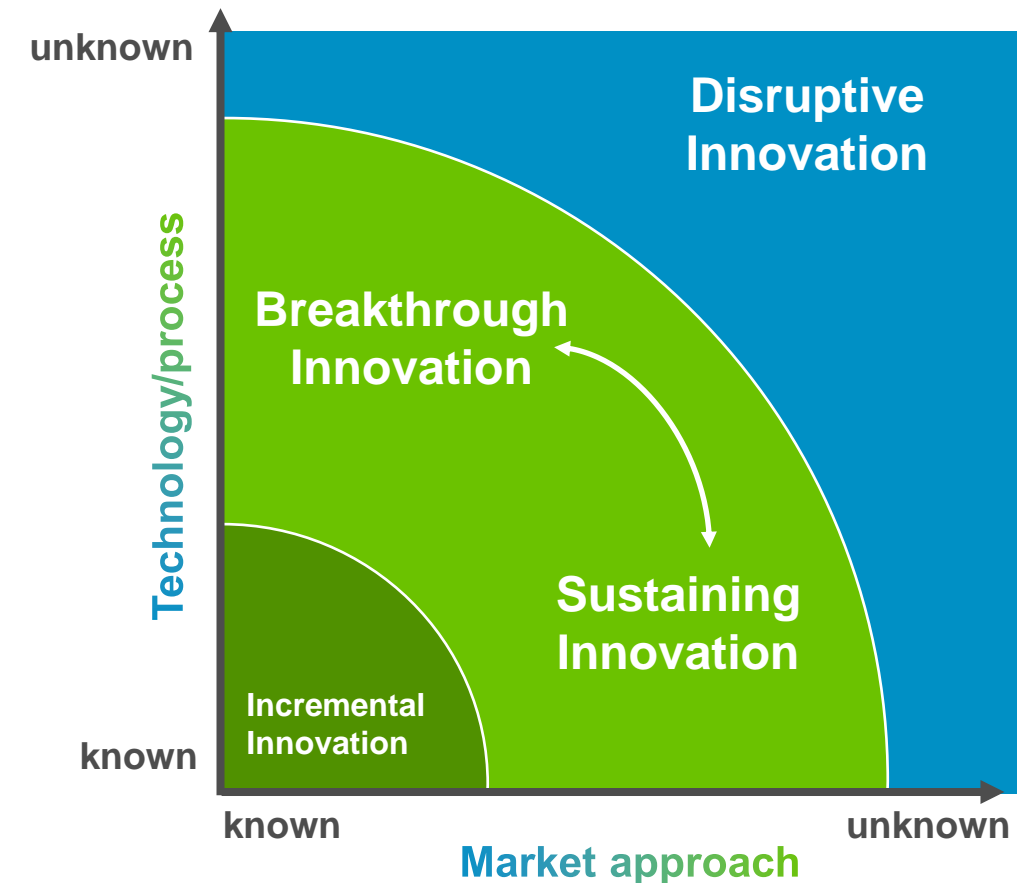
- Improve current products/processes and services to maintain the competitive position (Also strongly driven by operational excellence)

BREAKTHROUGH/SUSTAINING INNOVATION

- Achieve significant improvement of product/service/processes to get ahead of competition within current business model

DISRUPTIVE¹ INNOVATION

- Change products/services/processes or businesses in a disruptive way to create new markets

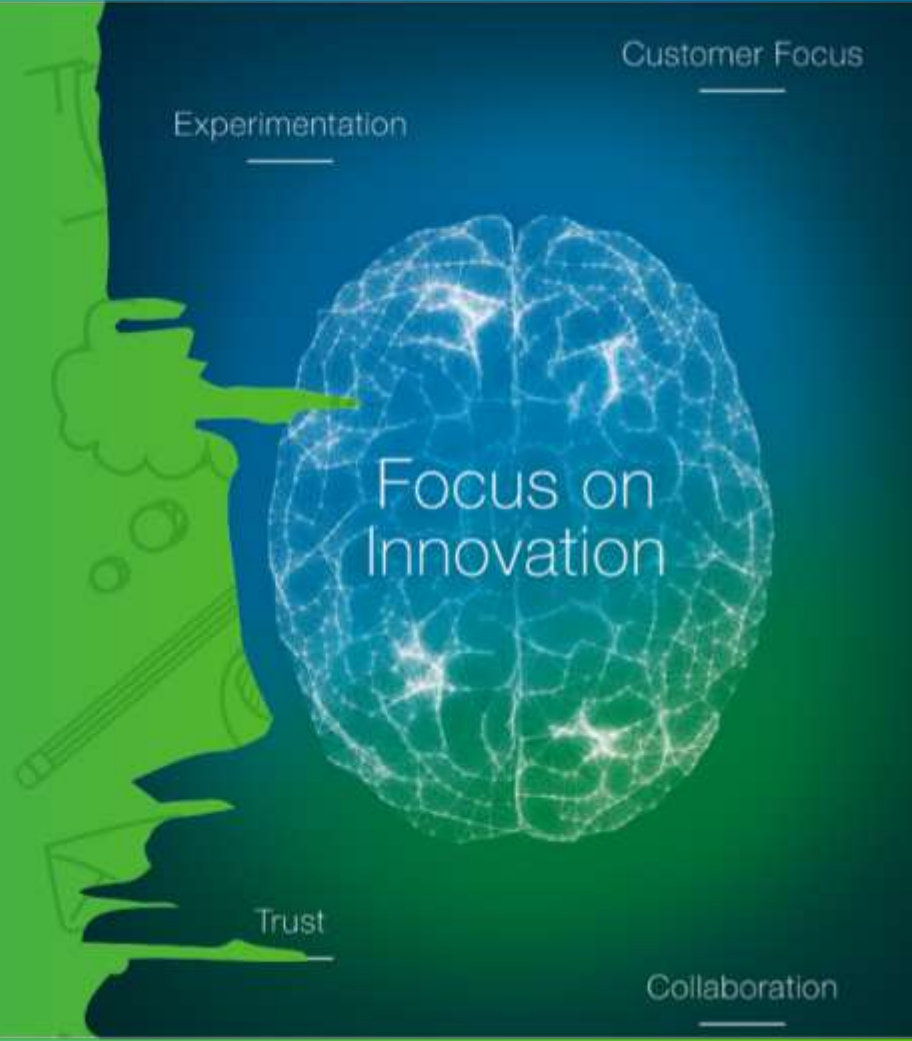


Innovating in what we do requires the **right culture, mindset and capabilities**



*To further strengthen our innovation culture, we have identified four **Focus Behaviors**, namely **Experimentation**, **Customer Focus**, **Collaboration** – all underpinned by **Trust**.*

Bayer Annual Report,
published March 2017



A snapshot of our **Focus Behaviors** to help further enhance our **culture**



Experimentation



Trust



Customer Focus



Collaboration



Innovation also requires **the right mindset:**

FROM TO

- We have **no time** > Let's **make time** and ask "what if?"
- What's the **business case?** > If you believe in it, **let's experiment**
- Innovation by **consensus** > Innovation by **challenging the status quo**
- Adapting** to the market > **Shaping** the market
- Creating solutions **FOR** the customer > Tackling challenges **WITH** the customer

WHAT IF...

INNOVATION STARTS WITH YOU.

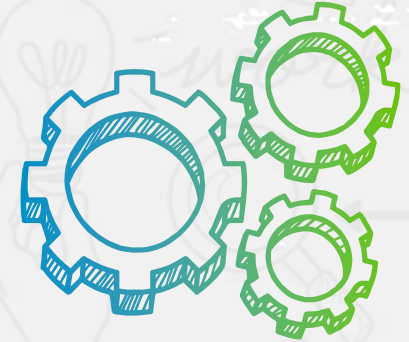
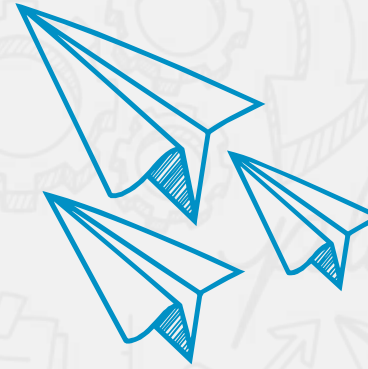
WE INSPIRE

WE CONNECT

WE COLLABORATE

WE LEARN

To help cultivate the right behaviors for future growth, we have created four innovation-enablers



WE CONNECT

Making innovation sustainable and leveraging networks to support business growth and acceleration

WE LEARN

Learning new innovation methodologies for superior business impact

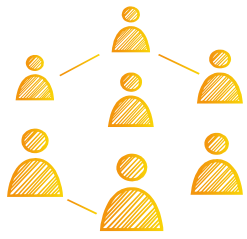
WE INSPIRE

Making innovation tangible using inspirational stories and events

WE COLLABORATE

Leveraging our collective innovation potential using internal and external platforms

WE CONNECT



In the Innovation Network, we link four essential roles to drive innovation in Bayer



INNOVATION AMBASSADORS

Passionate and committed business leaders who promote innovation in their country or function



INNOVATION COACHES

Engaged employees who connect people, provide guidance and promote local activities



INNOVATION COMMITTEE

Senior Business Leaders who set Bayer's Innovation Agenda, govern global initiatives to drive innovation in a sustainable manner



"INNOVATION MANAGERS"

Full-time experts for innovation, running programs & communities, trained in specific methodologies



INNOVATION NETWORK

WE LEARN

Because we understand that innovation does not happen in a day,
We Learn methodologies to help our team move forward



**Challenging
fixedness
using
Systematic
Inventive
Thinking**



**Becoming increasingly agile
by applying Lean Startup skills**



**Sharpening our customer focus
with Design Thinking**



Innovation & Leadership Skills



YOU INVERSE

LEARN
Unlock your full potential by exploring and learning innovation approaches and methodologies.

Explore all our learning material below OR Search

- ABOUT INNOVATION**
Learn what is innovation, its approaches and methodologies.
- GET INSIGHTS**
Learn how to get insights about your users, customers, industries and startups or your own business.
- GENERATE IDEAS**
Learn to ideate to improve existing products/ services/ process/ business models or build new ones.
- PROTOTYPE AND IMPLEMENT**
Learn how to prototype and implement ideas quickly.
- ABOUT TRAINING AND WORKSHOPS**
Learn how to further educate yourself and conduct workshops on innovation. Behaviours and more.

About Innovation
Learn what is innovation, its approaches and methodologies.

- Bayer's Innovation Agenda
- Innovation Network @ Bayer
- Systematic Inventive Thinking
- Design Thinking
- Lean Startup

Get Insights
Learn how you get insights about your users, customers, industries and startups or your own business.

- Customer Insight
- Customer Visit
- Industry Visit
- Startup Visit
- Define a Problem

Generate Ideas
Learn how to ideate to improve existing products/ services/ process/ business models or build new ones.

- Sit/Division
- Sit/Institution
- Sit/Subscription
- Sit/Task Unification
- Sit/Thinking Mats

Prototype and Implement
Learn how to prototype and implement ideas quickly.

- Prototyping
- Story-telling
- SIX Startups
- SIX Innovation Lab
- Grants4 Apps

About Training and Workshops
Learn how to further educate yourself and conduct workshops on innovation. Behaviours and more.

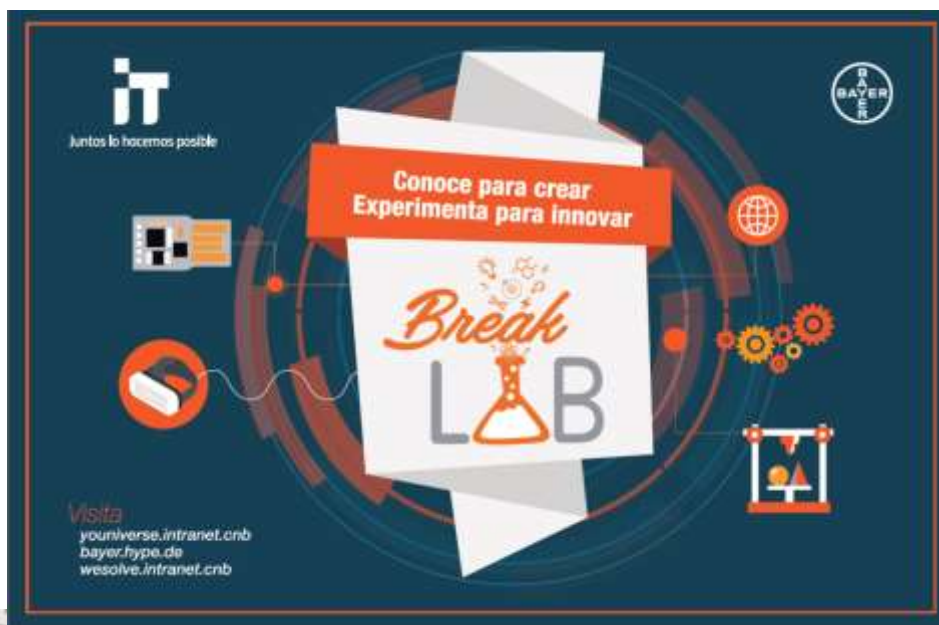
- Innovation Express
- Innovate in what you do
- Digital Learning Campus
- Innovation Behaviour
- Customer Focus

WE INSPIRE

We Inspire  and engage with **innovation events** and stories

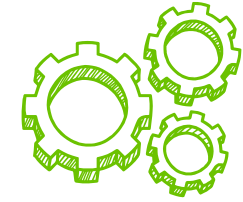


BreakLab – Experimentation



WE COLLABORATE

We Collaborate to leverage our Skills with **digital tools** and **platforms**



Internal fundraising platform



5 people during 5 weeks, Solving a specific challenge

5x5 Startups

Internal crowd-sourcing to solve challenges

We SOLVE

Innovation workshops with Multiple methodologies

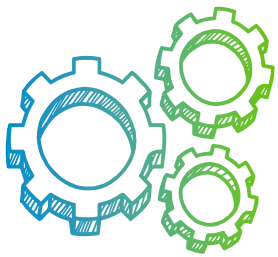
iPartner

Ideation Sessions lead by the iPartners

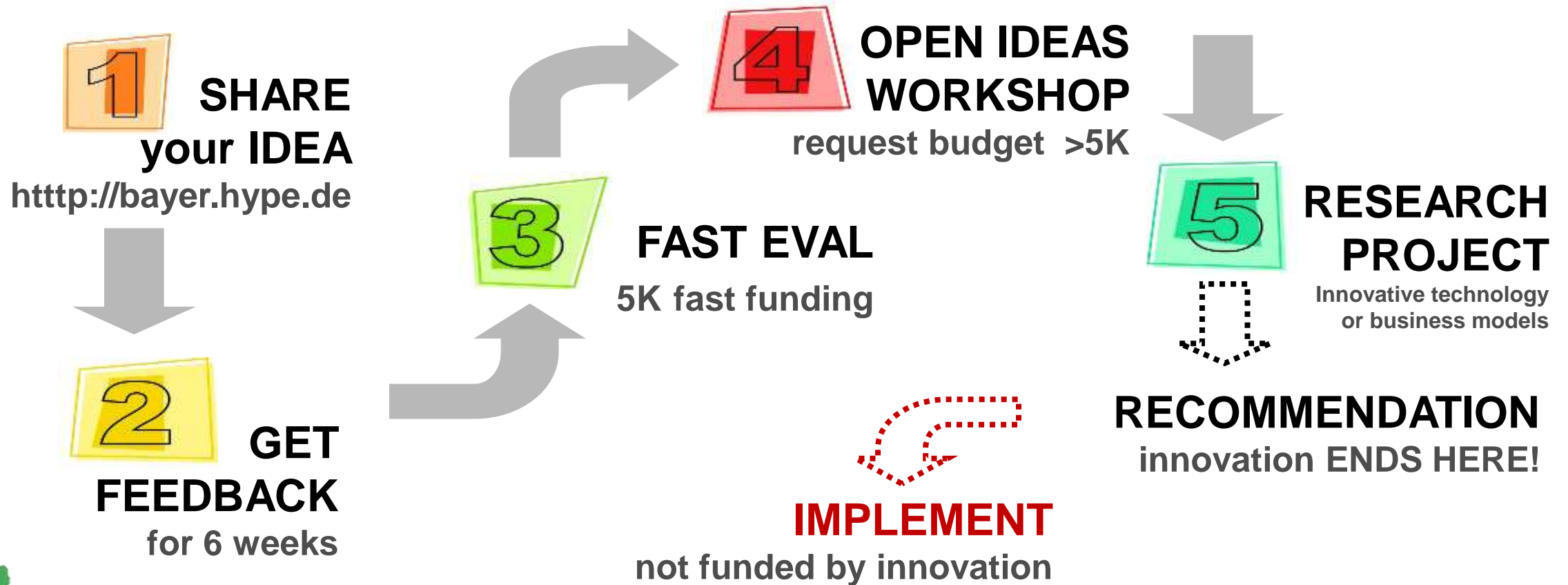


One-stop platform enabling employees to innovate

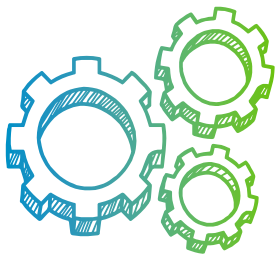
YOU NIVERSE



Open Innovation grants to research innovative technology or business models that have the potential to shape Bayer's future!



<https://bayer.hype.de>



Catalyst Fund

We provide resource to solve your business challenges

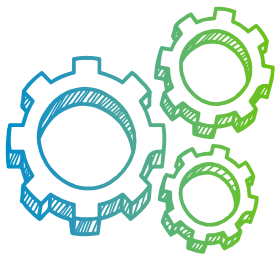


What you need to provide

- A **business challenge without a solution**
- **Commitment to staff** and start the project in Q2 (estimate 2 FTE, 1-2 days / week, key experts for workshops) and **implement in case of success**

What we provide

- **Innovation methodology support**
- **Funding** to cover **professional agency support** throughout your innovation process, incl. cost of visual prototypes & logistics where necessary



5x5 Startups



5 employees, full-time for **5 weeks** in **one place** innovating a business challenge or opportunity

Get into the mind of the **customer**, **prototype** and **test** in just a month!

Teams aren't experts in the topic – we want different backgrounds, experiences, cultures, jobs, hobbies...

Mentors

to guide

Budget

to prototype

Space

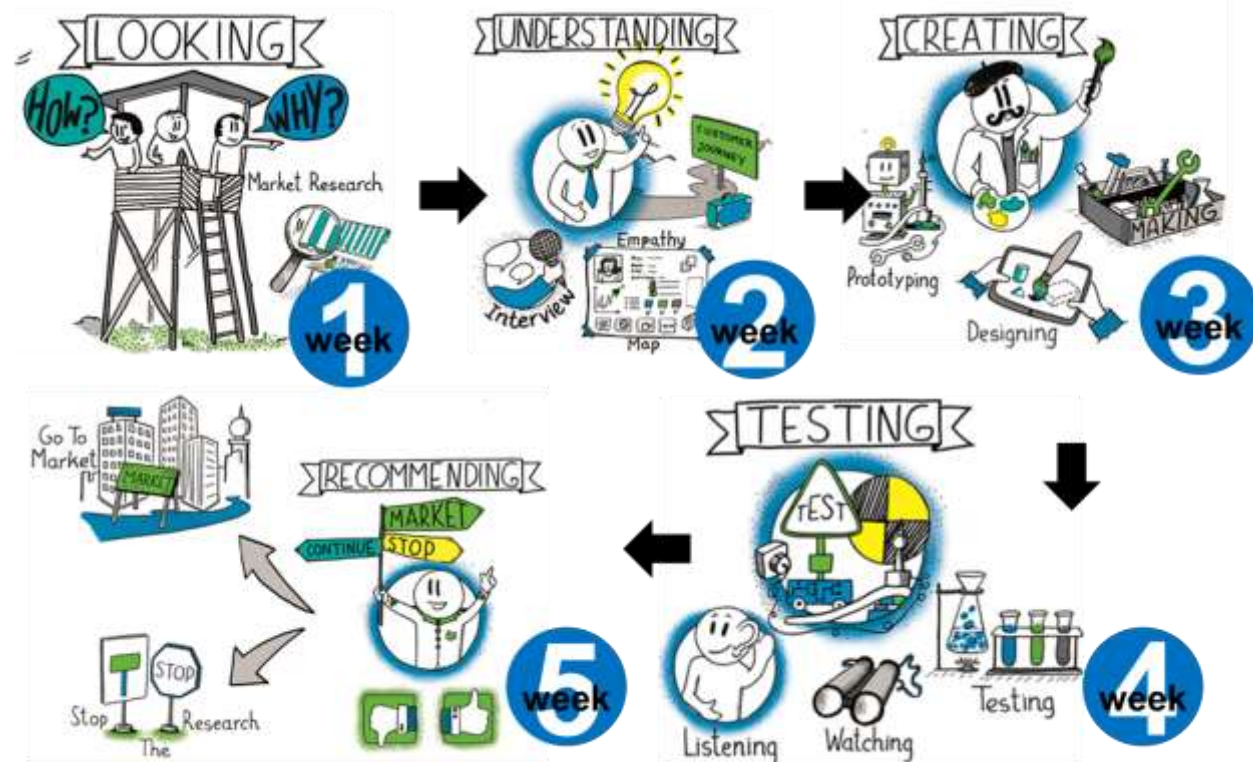
to create

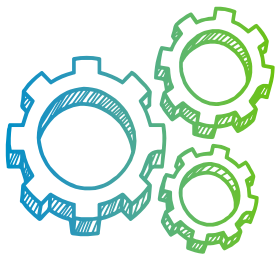
Experts

to coach

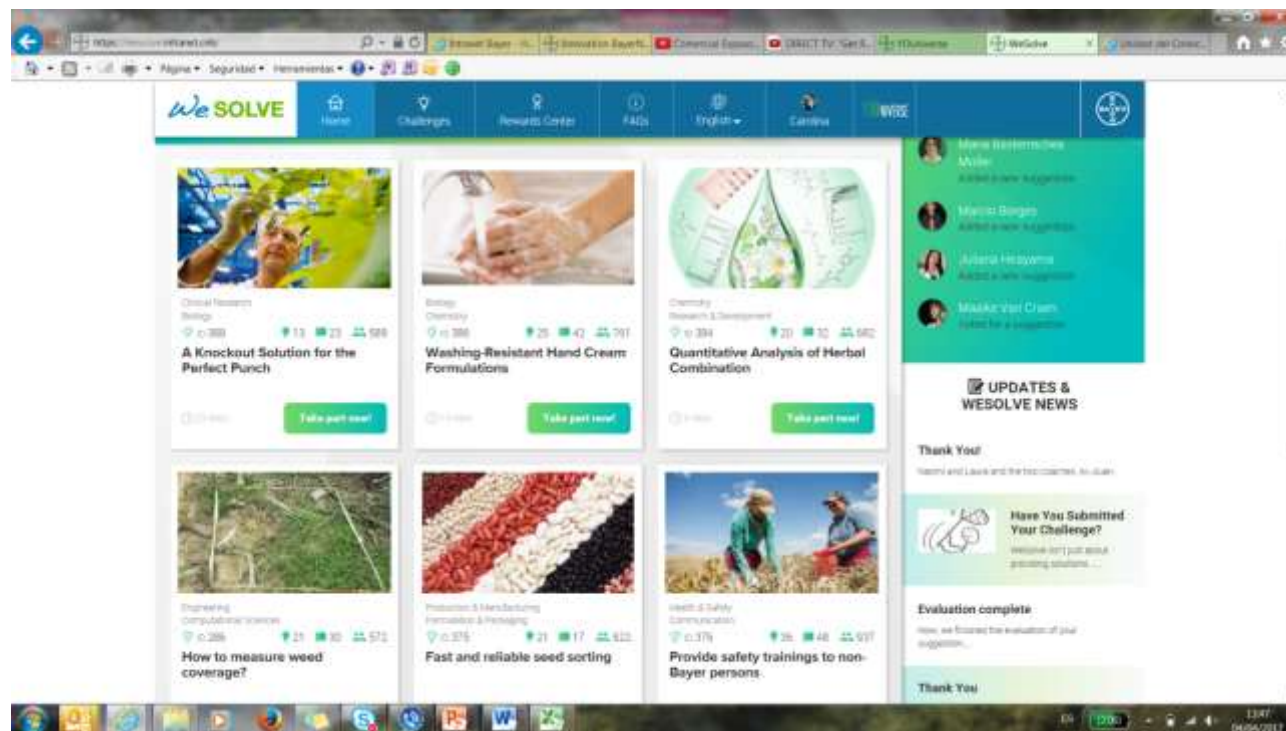
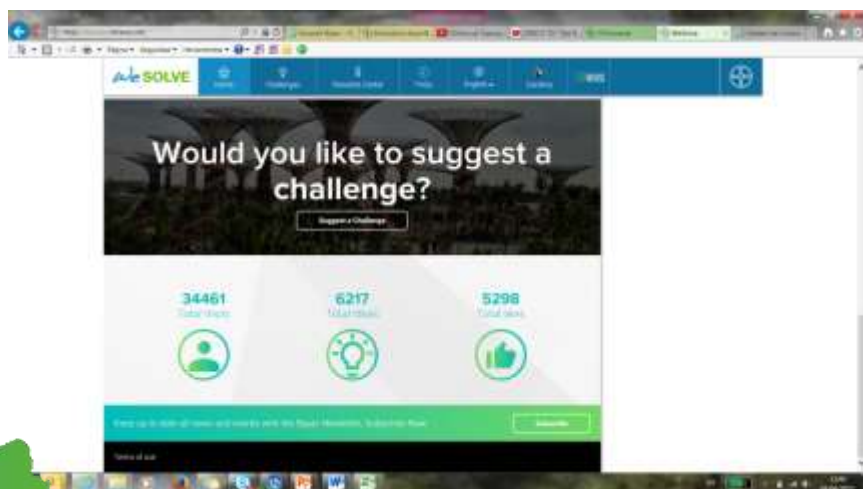
Support

to disrupt



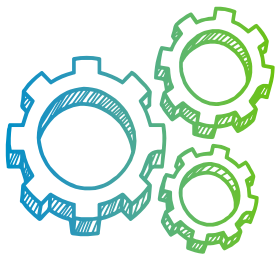


We SOLVE



DIGITAL INNOVATION

<https://wesolve.intranet.cnb/>



iPartners

... can help your team members to create ideas to possible solutions for problems or situations during 2 hour "mini-session"



WHAT IS A MINI-SESSION

WHAT IS THE PURPOSE OF A MINI-SESSION?

Solve a small business problem or create ideas to leverage an opportunity. The solution should be usable by the Topic Owner

WHAT IS THE STRUCTURE?

1-2 hour onsite meeting facilitated by an Innovation Coach, using SIT "fixedness-breaking" tools to create something new and valuable.


WHO IS INVOLVED?

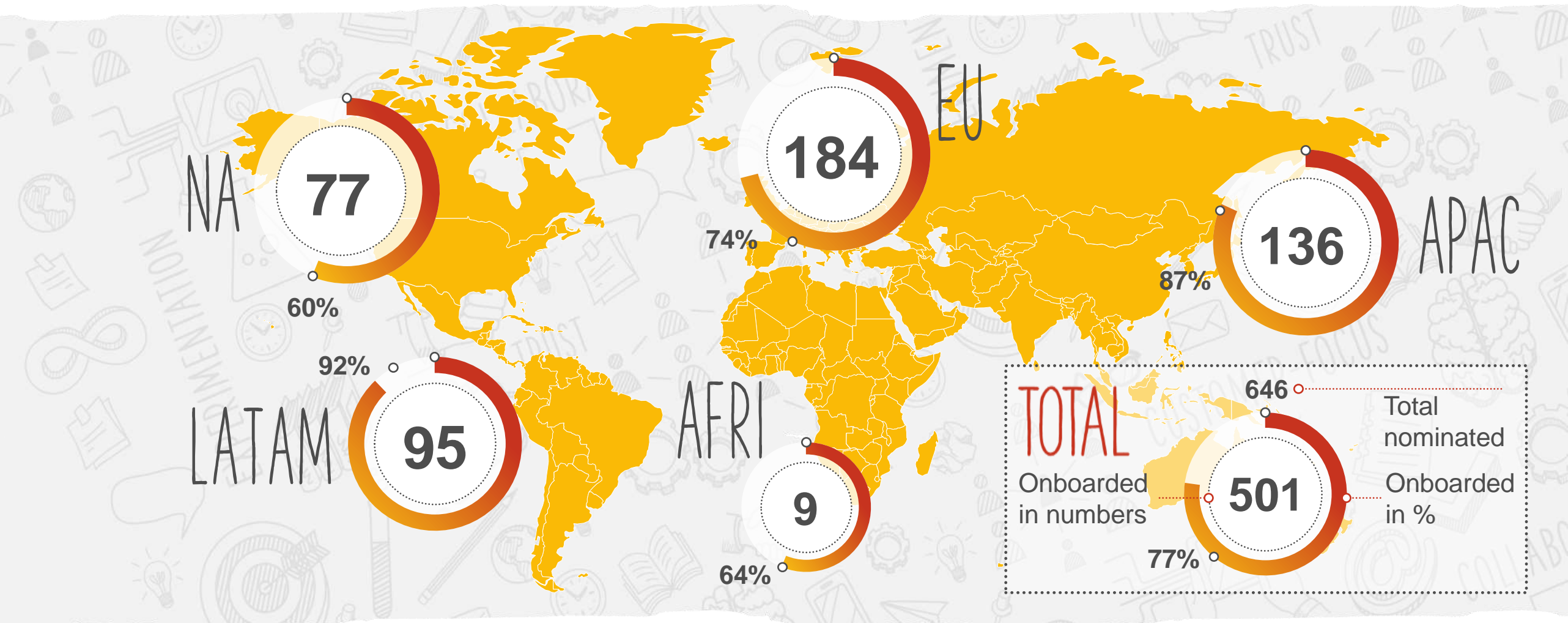
Topic Owner initiates the Mini-Session and sets the goals/invites participants and takes results to implementation

Participants - from various backgrounds, also from beyond the owners area

Innovation Coach plans and facilitates the mini-session



We Connect  and scale-up the innovation movement with our Network of 80 Ambassadors and **500 Innovation Coaches***



*This map highlights the location, number and percentage of Bayer's trained innovation coaches as nominated by Ambassadors

The Coaches run innovation-sessions across Bayer to create awareness and **tackle business topics from new perspectives**





PENSAMIENTO

CREATIVO

DIVERGENTE

CONVERGENTE

Lógico y racional

Sigue una secuencia de ideas

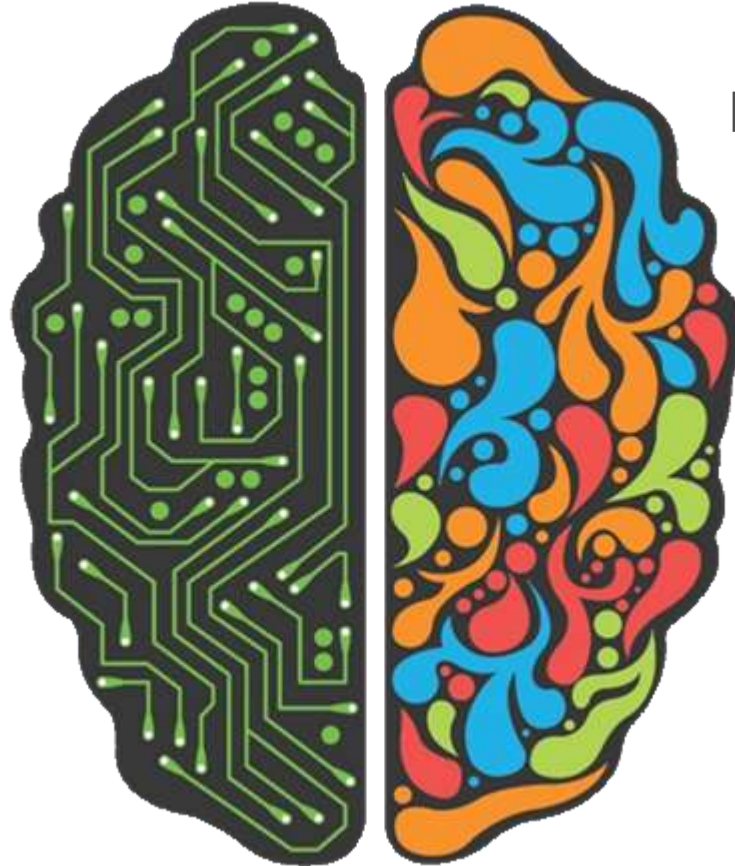
Es analítico, explica e interpreta

Desecha toda idea que no tenga una base sólida

Proceso Finito, siempre busca llegar a una solución

Importa la calidad de ideas

Busca juzgar ideas



Es abierto

Procesa ocurrencias, fantasías e intuiciones

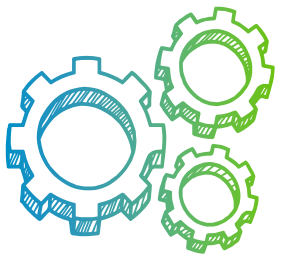
Es provocativo

No juzga el error

Proceso probabilístico, no siempre se llega a una solución

Importa la cantidad de ideas

Busca generar ideas



Habilidades del pensamiento creativo



FLUIDEZ

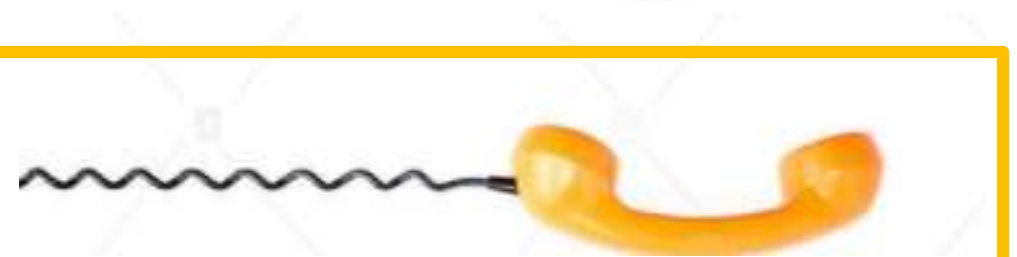


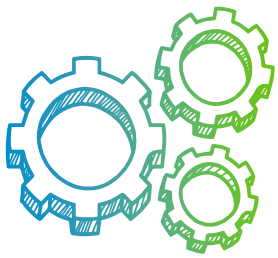
FLEXIBILIDAD



ORIGINALIDAD

COMUNICACIÓN





Business Workshops

Innovative mindset

Innovation needs a **problem** to solve and **passion** to research a solution

- 1 What **problem** do you want to solve?**
What is your strategy? Always start with the problem!
- 2 For **whom** do you want to solve it?**
Observe. use personas, empathy maps.
- 3 Rapidly innovate**
Do early prototypes! Get outside the office!
- 4 Fail fast and try again!**
Technology moves so fast – experiment!



DIGITAL INNOVATION

BAYER DESIGN THINKING



1 Healthy lifestyle – Food



2 Biolactosecurity Program



We collaborate & connect through Open Innovation Programs



Startup Accelerator



Grants for innovative IT projects which may solve business challenges.



Grants for innovative health and agricultural solutions



Young leaders discuss and create networks to bring solutions for the Sustainable Development Goals

Open Innovation Programs to accelerate internal innovation



2 Challenges
2 Digital Solutions

CH



PH



BYCI Winners from 3
countries

Innovative projects in Agriculture and
Health with social focus



2 winners from Colombia

100 líderes jóvenes reunidos Bruselas, por
una agricultura moderna y sostenible



Everything you have seen and more can be found on our **YOU**niverse platform at [go/youniverse](https://youniverse.intranet.cnb)



<https://youniverse.intranet.cnb>



Science For A Better Life

Thank you



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