



# Green clusive






Co-funded by  
the European Union



T  30




55






**F**




Creado por/Created by:  
Guillermo Solano - Andrea Ángel

[www.wakeupbrain.com](http://www.wakeupbrain.com)

S  25




70






**A**




Creado por/Created by:  
Guillermo Solano - Andrea Ángel

[www.wakeupbrain.com](http://www.wakeupbrain.com)

R  20



85

**I**

Creado por/Created by:  
Guillermo Solano - Andrea Ángel

[www.wakeupbrain.com](http://www.wakeupbrain.com)

U  35



115





**R**

Creado por/Created by:  
Guillermo Solano - Andrea Ángel

[www.wakeupbrain.com](http://www.wakeupbrain.com)

ECO-ENTREPRENEURSHIP: Steering the world towards  
**F.A.I.R<sup>2</sup>** future



# A bit about myself



- Innovation and new ways to create powerful things from 2015
- 60 cities in Colombia to promote social innovation in rural communities
- Colombia, South Africa, Japan, Austria
- B.A Finance and International Trade
- Dissertating a M.Sc. in Sustainable Development
- Research lines: Innovation management, Circular Economy, Tripple Bottom Line, Agile and Lean
- Leader of the Eco-Innovation LAB WakeUpBrain in Austria – new!

 [www.linkedin.com/in/dicaromonroy/](https://www.linkedin.com/in/dicaromonroy/)





# Introduction

- What is eco-entrepreneurship
  - The importance of sustainability in business
  - Two global examples related to sustainability
  - Challenges and opportunities
  - Tips and Best practices
  - F.A.I.R – Provide framework and some tips on how to get started
  - Play a bit with the framework
  - Wrap It Up! SBM Canvas
  - Conclusion
- 
- 





# What is eco entrepreneurship?

- Eco entrepreneurship is the practice of starting and running a business with the goal of **creating positive environmental and social impact**
  - It involves **identifying** and **solving environmental and social problems** through **innovation** and **entrepreneurship**
  - Start businesses that produce eco-friendly products/services, use sustainable production methods, and **minimize** their **environmental footprint** or **amplify positive impacts**
- 
- 





# The importance of sustainability in business

Environmental: Businesses that are not environmentally sustainable may contribute to climate change, pollution, and other environmental problems

Social: Unsustainable business practices can have negative impacts on communities, such as displacement, loss of natural resources, and social inequality

Economic: Sustainability can help businesses save money by reducing waste and increasing efficiency

# Sustainable and Unsustainable Practices from around the Globe



examples that has been  
connected to ECO-friendly:



TESLA





- 100% renewable sources energy in US and 76% globally.
- Recycled fibers that reduce emissions by as much as 80% vs virgin fibers
- Denim is dyed using Advanced Denim technology, which uses 50% less electricity emitting 25% less CO2 into the environment

While no company is perfect, from what we can tell whenever Patagonia's supply chain has been pointed at for poor practices their response was to make the required change.



The company has disrupted the traditional automotive and energy industries by offering products that are more environmentally friendly than their fossil fuel-based counterparts.

More environmentally friendly after about 20,000 miles on the road.

Batteries have been linked to environmental pollution, human rights violations, child labor, and extremely high water consumption

While electric vehicles are a step a bit closer in the right direction for sustainability, it is **important for companies to consider the entire lifecycle of their products**

A hand is shown holding a small green plant with several leaves. The background is a field of similar plants, with sunlight filtering through, creating a bokeh effect of light spots. The overall scene is bright and natural.

**NO COMPANY IS PERFECT AND THE MARKET IS NOT ANY DIFFERENT.  
THE GAPS CREATE THE OPPORTUNITY FOR INNOVATION AND PROVIDE  
MORE ROOM FOR NEW PLAYERS IN THE MARKET**

# Challenges of starting an eco-friendly business

---

**Lack of access to funding and capital (private):** Eco-entrepreneurs often face difficulty in securing funding from traditional sources such as banks and venture capitalists, due to the perceived high risk and lack of understanding of their business models.

---

**Difficulty in scaling and commercializing:** Eco-entrepreneurs may have a hard time scaling their businesses and commercializing their products or services, due to a lack of a ECO-Friendly infrastructure in the market

---

**Regulatory and policy challenges:** Eco-entrepreneurs may face challenges related to government regulations and policies, as well as navigating complex and constantly changing environmental laws.



## OPPORTUNITIES

- Growing consumer demand for sustainable products and services: As awareness of environmental issues continues to rise, consumers are increasingly looking for products and services that are environmentally friendly and sustainable.
- Government incentives and funding: Governments around the world are recognizing the importance of environmental sustainability and are offering various incentives and funding opportunities to support eco-entrepreneurship.
- Collaboration and partnerships: Eco-entrepreneurship often requires collaboration and partnerships with other businesses, organizations and individuals to develop and bring sustainable products and services to market.



# Sectors of huge opportunity



Sustainable fashion

Renewable energy

Organic farming

Eco-tourism

Green building

# key considerations for eco-entrepreneurship



ENVIRONMENTAL IMPACT: A TRULY ECO-FRIENDLY BUSINESS SHOULD MINIMIZE ITS NEGATIVE IMPACT ON THE ENVIRONMENT



SOCIAL RESPONSIBILITY: ECO ENTREPRENEURSHIP ISN'T JUST ABOUT THE ENVIRONMENT - IT'S ALSO ABOUT BEING SOCIALLY RESPONSIBLE



PROFITABILITY: IT'S IMPORTANT TO REMEMBER THAT ECO ENTREPRENEURSHIP IS STILL ABOUT RUNNING A SUCCESSFUL BUSINESS

# TIPS AND Best practices in eco-entrepreneurship

Conducting a thorough **environmental AND social assessment**

Sustainable practices **and intentional circularity** from early states on the value chain.

Staying informed about environmental **regulations and industry trends**

Communicating your **commitment to sustainability** to build trust and loyalty.

Monitoring and **evaluating** your **business operations**

**Collaborating** with other firms (**whole system**)

**Continuously learning** about the latest developments

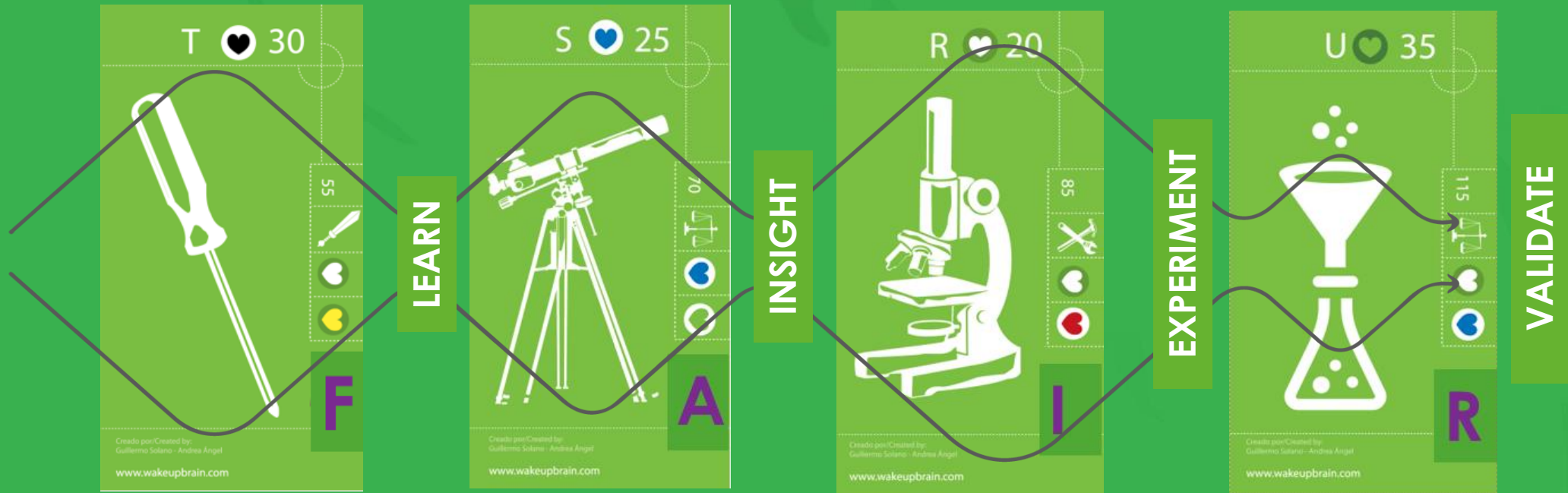
Building a strong **ethical** and **value-driven** culture

Supporting and participating in **sustainable initiatives**

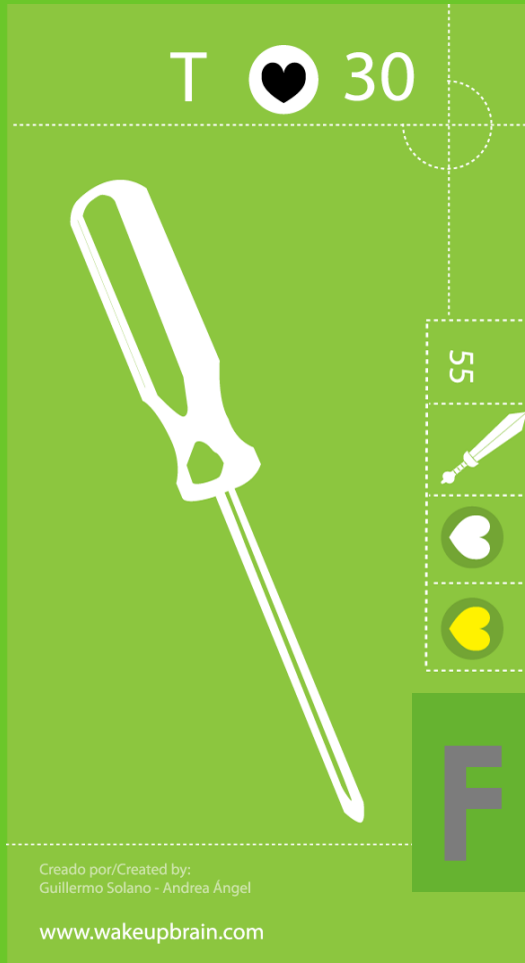
Consider the triple bottom line of **people, planet, and profit.**



# F.A.I.R<sup>2</sup> ECO-ENTREPREURSHIP



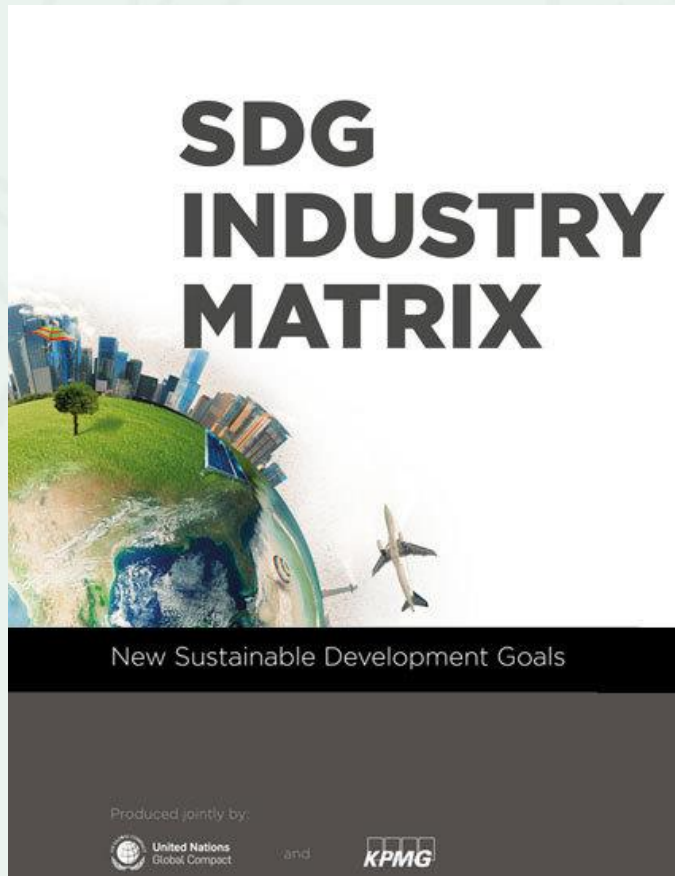
# Formulate a Frame



Define what you want to achieve with your entrepreneurial venture, whether it's a specific product or service, a certain market or customer base, or a specific environmental impact or social cause.



# Formulate a Frame



#### Access Resource

- ▢ [Financial Services](#) (English)
- ▢ [Food, Beverage & Consumer Goods](#) (English)
- ▢ [Climate Extract](#) (English)
- ▢ [Healthcare & Life Sciences](#) (English)
- ▢ [Industrial Manufacturing](#) (English)
- ▢ [Transportation](#) (English)
- ▢ [Energy, Natural Resources, Chemicals](#) (English)

## A

### PURPOSE

The SDG Industry Matrix aims to inspire and inform greater private sector action to drive inclusive, sustainable prosperity.

## B

### OPPORTUNITY

Through the lens of “shared value” the private sector can identify opportunity in addressing social and environmental challenges.

## C

### METHODOLOGY


The SDG Industry Matrix has been compiled through a participatory three step process:

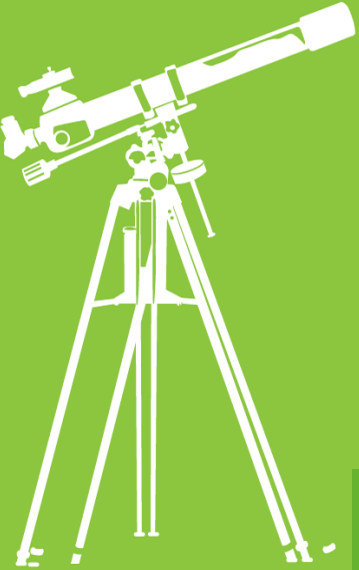
## D

### SYNERGIES




The SDG Industry Matrix draws on the commitment that companies have already expressed to the UN Global Compact’s ten principles.

# Amplify Your Analysis

S  25



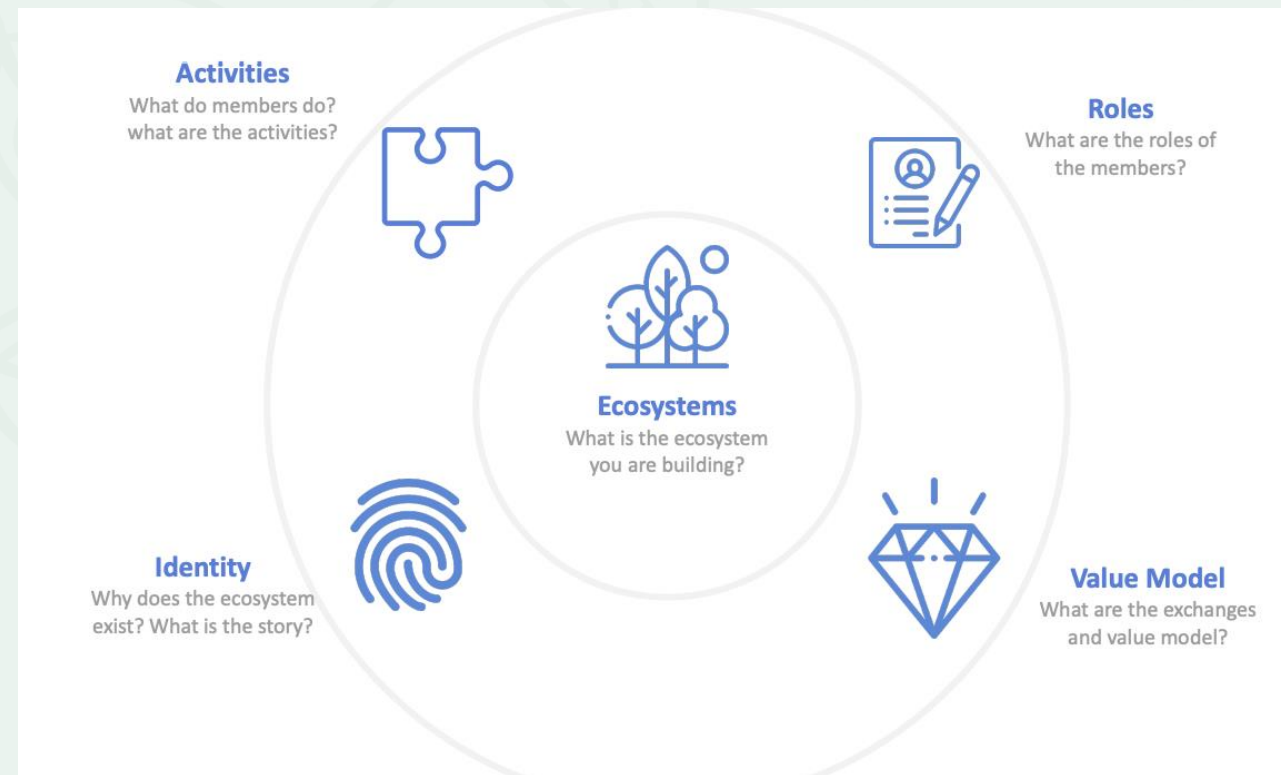
70



**A**

Creado por/Created by:  
Guillermo Solano - Andrea Ángel

[www.wakeupbrain.com](http://www.wakeupbrain.com)



# Amplify your Analysis

Ecosystem mapping is an important tool for identifying and connecting the innovation and entrepreneurial assets in a community, and for identifying and addressing any obstacles or limitations to the growth and development of the ecosystem

As an ecosystem builder, it's crucial to regularly refer back to your mapping and use it as a reference when proposing ideas

To get started with ecosystem mapping, you should first define the ecosystem you are working on and identify the key actors with the necessary capabilities to help it thrive

# Toothbrush

by Ambra Dentella, Joseph Rouse and Kenneth Arnold



First stakeholders



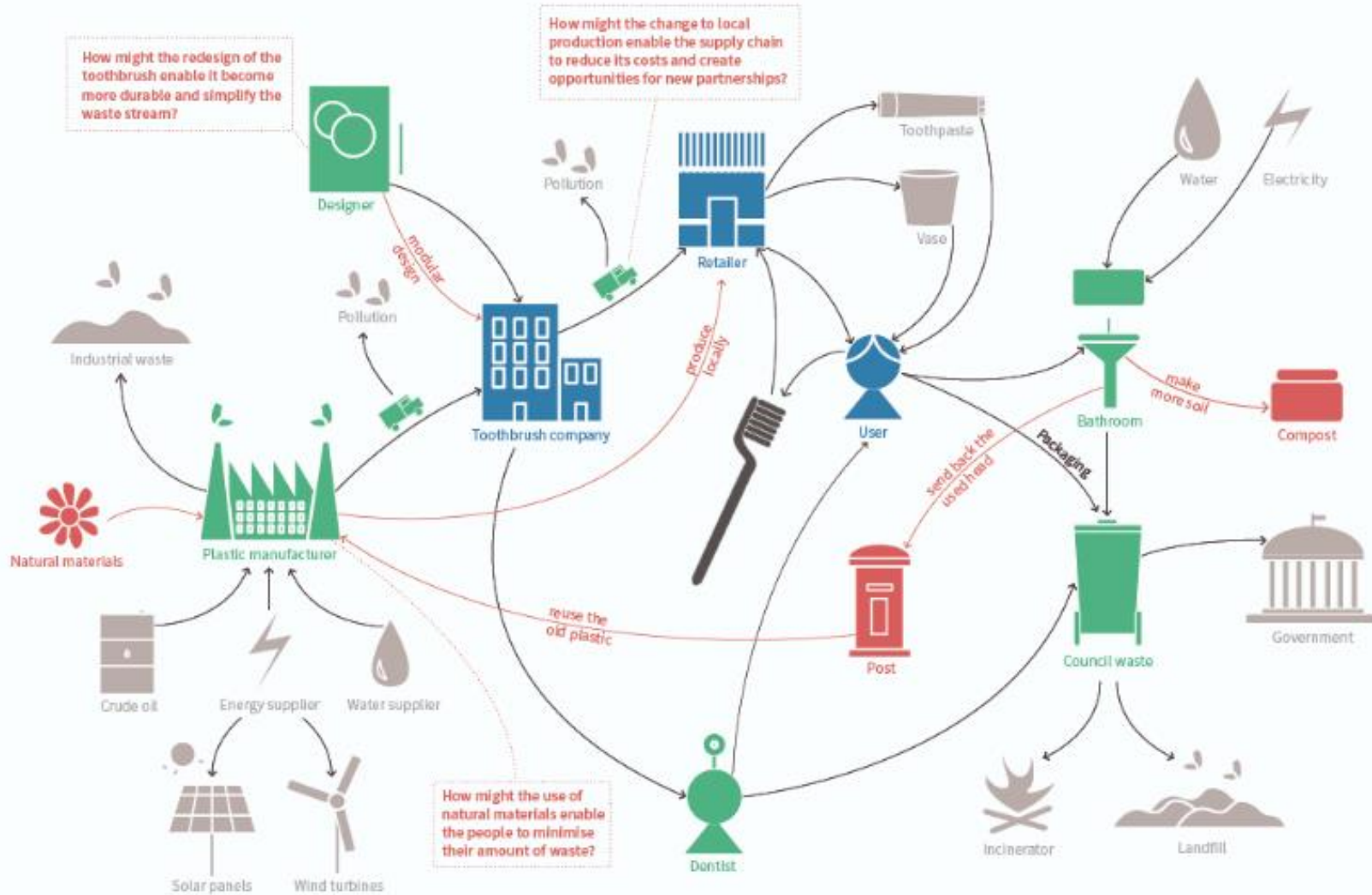
Second stakeholders



Third stakeholders



Opportunities



# INSTIGATE WITH IDEAS

R  20



85



Creado por/Created by:  
Guillermo Solano - Andrea Ángel

[www.wakeupbrain.com](http://www.wakeupbrain.com)



# Instigate with Ideas

- Ideas can be formed by combining existing knowledge, experiences, and observations. They can also be the result of creative thinking or imagination.
- Ideas can be simple or complex, and they can be used to explain or understand the world around us, to solve problems, to create new things, or to inspire action.

Developing and selling environmentally-friendly products, such as biodegradable packaging or eco-friendly cleaning products

Providing consulting or advisory services to help businesses reduce their carbon footprint and adopt sustainable practices

Starting a business that focuses on the conservation or restoration of natural resources, such as forests, rivers, or wetlands

Developing and selling renewable energy technology, such as solar panels or wind turbines

Business that helps individuals and organizations recycle and compost waste

Sustainable transportation options, such as electric or hybrid vehicles





**How might  
Nature solve this  
problem?**

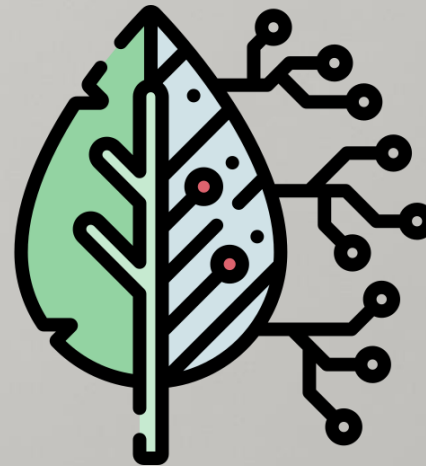
## BIOMIMICRY

### thinking process:

From Biology to Design:  
Finding inspiration in Nature and apply  
to a design space



From Challenge to Biology, where you  
go out and look for a specific biology  
to a very specific need



### Biomimicry Institute:

1.700 strategies of  
living things that  
can serve as inspiration  
for human innovation.

# EXAMPLE FOR INSIDES-OUT

- Take apart an everyday product to build empathy and understanding around the implications of disassembly and recovery of materials and parts
- Digital Systems: As more and more software developers use an agile process, digital systems are designed inherently to evolve, scale, be feedback-rich, and iterate characteristics that are circular by nature





# Release and Recovery

U  35



115



R

Creado por/Created by:  
Guillermo Solano - Andrea Ángel

[www.wakeupbrain.com](http://www.wakeupbrain.com)

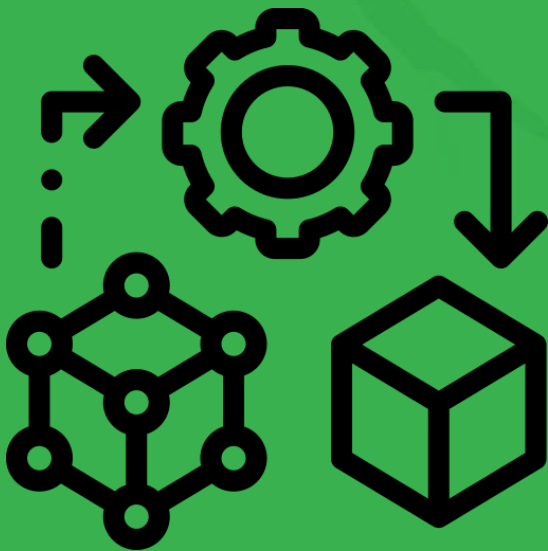


# Release and Recovery

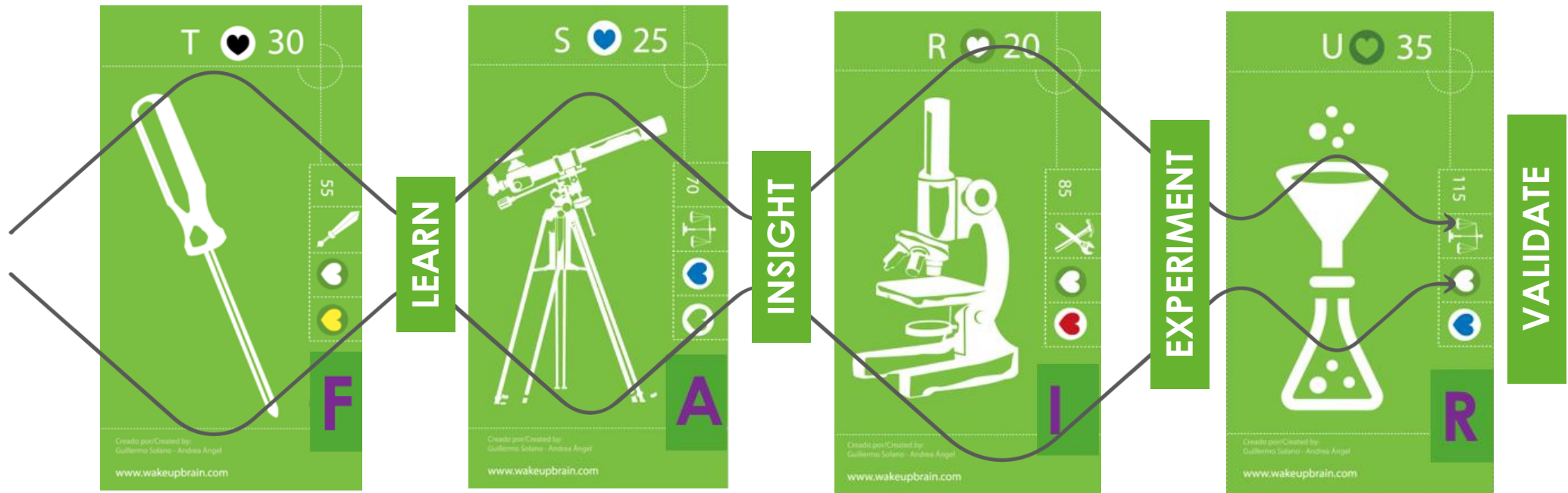
We can gather valuable feedback and make adjustments to make sure our solution is practical, works well and is economically viable. This step is important for **creating a sustainable business model** that makes a positive impact on society and the environment

We want to prototype the following things:

- The solution itself, like a new type of packaging.
- The value proposition, which means the benefits our solution provides to different stakeholders.
- The business model, how we plan to make money and pay for our solution.
- The implementation plan, the steps and resources needed to bring our solution to market.
- The monitoring and evaluation plan, how we measure the impact of our solution and improve it over time.

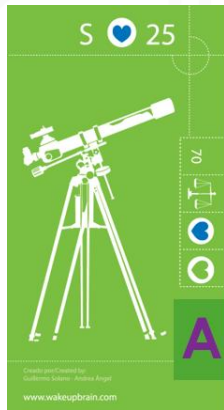


# F.A.I.R<sup>2</sup> ECO-ENTREPREURSHIP



# BRAINSTORMING

Instigate with ideas!



## INSIGHTS

- Services that supply an **easy and fast ways** to prepare meals
- New **packing material** that biodegrade faster but allow the packings industry to satisfy the diverse demand of their products (size, functionality, resistance)
- Local initiatives to support the preparation of home-cooked meals. *No needed for single-use packing since it will **return to the next service.***



**WHAT ARE SOME CREATIVE IDEAS FOR DESIGNING SINGLE-USE PLASTIC PACKAGING FOR READY MEALS THAT NOT ONLY PROTECT THE FOOD BUT ALSO REDUCE ENVIRONMENTAL IMPACT?**



## FRAME

**Need for a more sustainable packaging solution for ready meals.**



- Ready meals are packaged in plastic containers at the manufacturer, then transported in plastic pallets, and finally distributed to retailers in plastic wrapping.
- Cost of sustainable packaging solutions is higher than the cost of traditional packaging, so the ready meals manufacturers are not willing to pay more for sustainable packaging.
- Retailers are using plastic packaging for ready meals as it's cheap and it helps to keep the food fresh for a longer period.
- 80% of the packaging used for ready meals ends up in landfills and only 20% is recycled.



## ECOVATIVE: GROWING SUSTAINABLE PRODUCTS FROM MUSHROOM MYCELIUM TO SAVE THE PLANET

Design were inspired by the way mushrooms growing on wood chips bonded them together with their roots.

*“We’re using mushrooms to create an entirely new class of materials which perform a lot like plastic.” Ecovative*





# PROTOTYPING

U ♡ 35

115

R

Created and Owned by Guillermo Salazar - Arcadis Angel  
www.wakeupbrain.com

## Summary of potential CE business model elements to consider



<p><b>Key Partners</b> </p> <p><b>Circular materials supplier:</b> Supplier of circular materials</p> <p><b>Reverse logistics:</b> Provided by a third party?</p> <p><b>Technology:</b> Partners providing key technologies.</p>	<p><b>Product design:</b> Design-for-"X" (repair; maintenance; disassembly; remanufacturing; recyclability; material substitution; etc.)</p> <p><b>Reverse logistics:</b> Executed in-house by organisation?</p> <p><b>Service provision:</b> Provision of 'product-as-service'; and/or value-added services (e.g. preventative maintenance, asset diagnostics etc.)</p> <p><b>Key Resources</b> </p> <p><b>Asset management platform:</b> Booking, paying, tracking assets.</p> <p><b>Specialised production process:</b> Specialised processes and facilities (e.g. remanufacturing; 3D manufacturing; etc.)</p> <p><b>Assets:</b> Assets or product stock available to provide as a service.</p>	<p><b>Lower (lifetime) cost:</b> Lower cost of product, or reduced lifetime cost of ownership to an end-user.</p> <p><b>Performance:</b> Provides outcome and level of performance corresponding to a customer's 'job-to-be-done' (e.g. equipment up-time; output; etc.). Includes product-service system models.</p> <p><b>Access:</b> Convenience of on-demand availability; flexibility; and greater range of choice. Models include: Pay-as-you-go; rental; leasing.</p> <p><b>Sustainability:</b> Provides a sustainability-related outcome that is valued by the customer (environmental, social, etc.).</p> <p><b>Co-value:</b> Value provided to a 'vertical customer' outside of the main value chain.</p>	<p><b>Customer Relationships</b> </p> <p><b>Long-term or recurring?</b> Such as a subscription, part of a long term relationship service, etc.</p> <p><b>Transactional?</b> Single sale, one-off transaction.</p> <p><b>Channels</b> </p> <p><b>Re-sale channel:</b> Distinct sales channel, separate from 'new' product sales</p> <p><b>Return channel:</b> Collection or return channel for product at end of life.</p> <p><b>Secondary material market:</b> Markets for sale of recovered materials (co-products; scrap; recycled, etc.)</p>	<p><b>Customer Segments</b> </p> <p><b>New customer segment?</b> Sale to a different customer segment</p> <p><b>Vertical customer?</b> Customer outside of main product value chain</p>
<p><b>Cost Structure</b> </p> <p><b>Labour:</b> Labour cost (increase or reduction?)</p> <p><b>Materials:</b> Materials costs (increase or reduction?)</p> <p><b>Waste Disposal:</b> Cost of disposing waste outputs (increase or decrease?)</p> <p><b>Financial Incentive:</b> To incentivise take-back or return of product.</p> <p><b>Financing cost:</b> Cost of customer financing (e.g. for leasing solutions)</p>		<p><b>Revenue Streams</b> </p> <p><b>Product sale revenue:</b> Sale of product, component, or material (customer-owned)</p> <p><b>Bundled product-service sale revenue:</b> Sale of product and service bundle (customer-owned)</p> <p><b>Service sale revenue:</b> Sale of service only (no ownership)</p> <p><b>Waste-as-value:</b> Revenue stream from waste or co-product being used instead of disposed</p>		
<p><b>Social and environmental</b></p> <p><b>Potential decrease of jobs in new products or virgin material sector</b></p> <p><b>Potential increase of environmental impacts due to additional transport between value chains</b></p>		<p><b>Reduced waste to landfill.</b></p> <p><b>Reduced waste to incineration.</b></p> <p><b>Due to lower item cost, access offered on an ad-hoc basis to users unable to afford purchase of asset.</b></p> <p><b>Increase of jobs in circular materials/ repair and refurbishment/ service/ recovery and recycling sector.</b></p>		

# Conclusion

***Tomorrow's business can no longer operate under the same principles as yesterday's. It not only needs to create economic value, it needs to do so by working with society and within social/planetary boundaries***

Whether you're interested in fashion, energy, agriculture, tourism, or something else entirely, there are countless opportunities to make a difference and build a successful business

