



Como el proceso de diseño, el management y la tecnología pueden cambiar la vida de las personas: el ejemplo del Challenge Based Innovation Course

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Malaga 15 octubre 2015

Design or Design Thinking?

VIEW MORE FROM THE
September 2015 Issue



EXPLORE THE ARCHIVE

Design or Design Thinking?



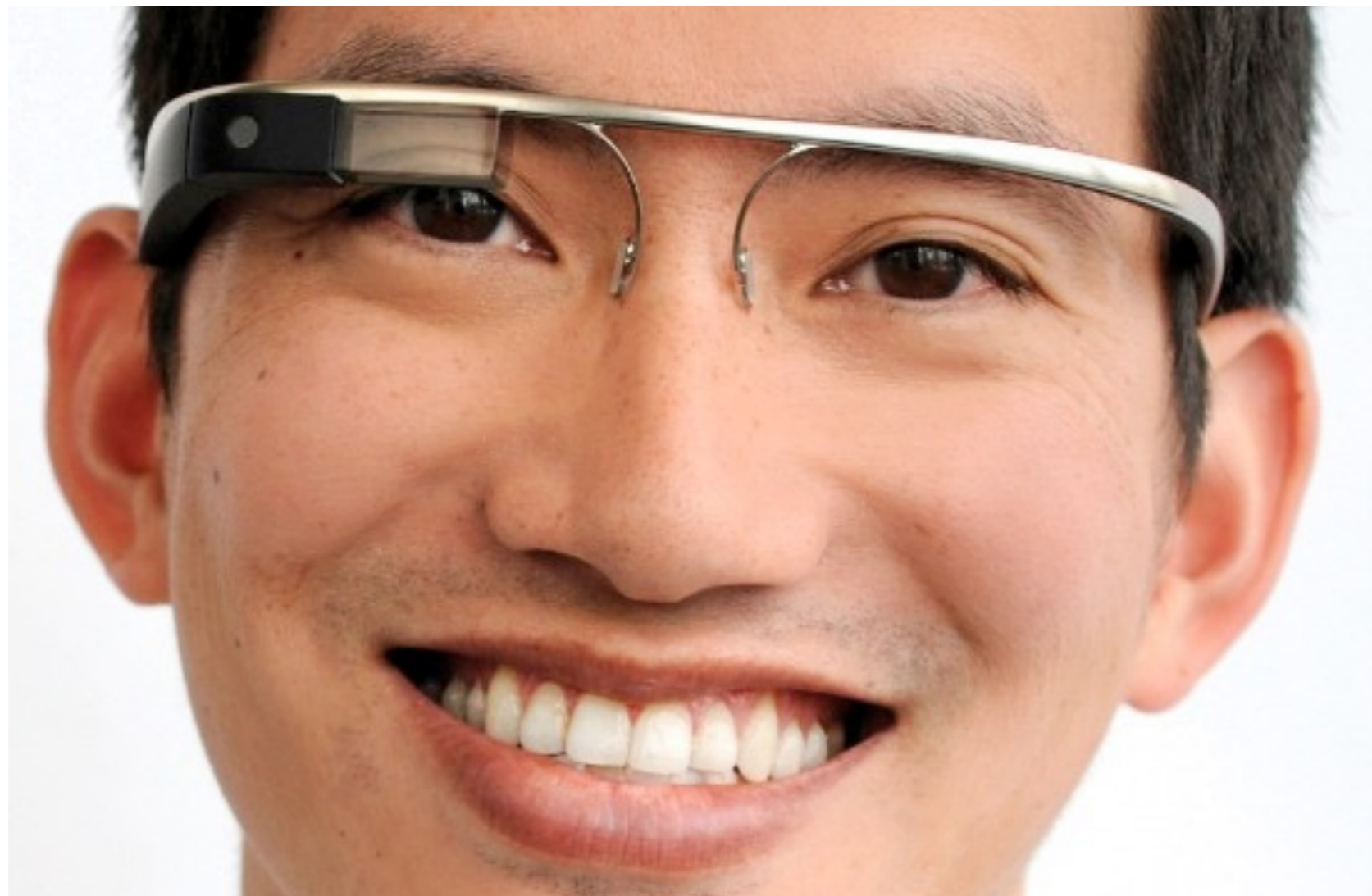
Design or Design Thinking?



Design or Design Thinking?



Design or Design Thinking?



Design or Design Thinking?

1.

Google Glass, qualcosa è andato storto

2.

Il prezzo

3.

Gli indossabili

4.

Il design

5.

La privacy

6.

Vulnerabilità

7.

La salute

8.

Glasshole

Design or Design Thinking?



Design or Design Thinking?



Design or Design Thinking?



Design or Design Thinking?



Design or Design Thinking?



Design or Design Thinking?



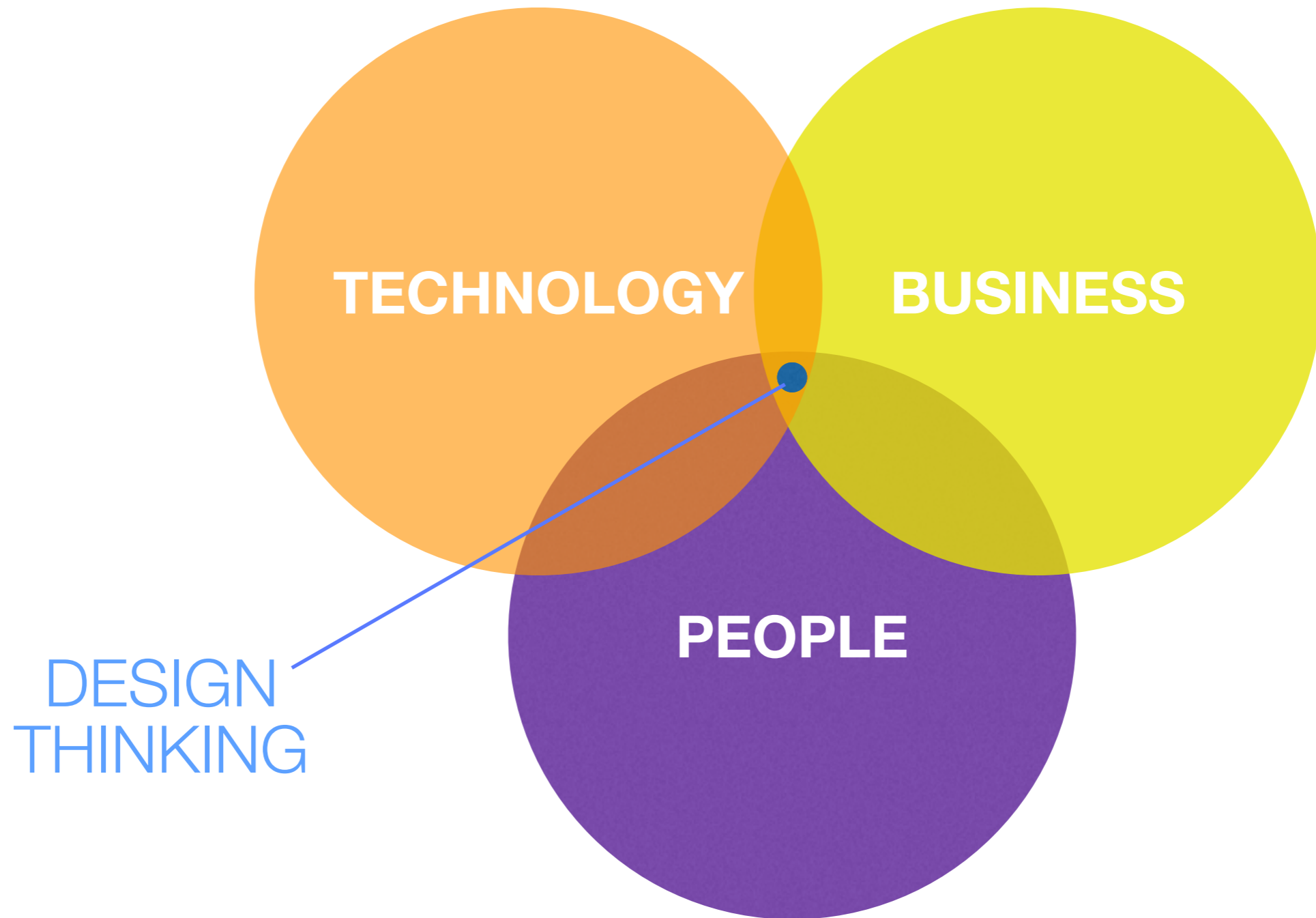
Design, Design Thinking or Self Promotion?



Design, Design Thinking or Self Promotion?



Design Thinking

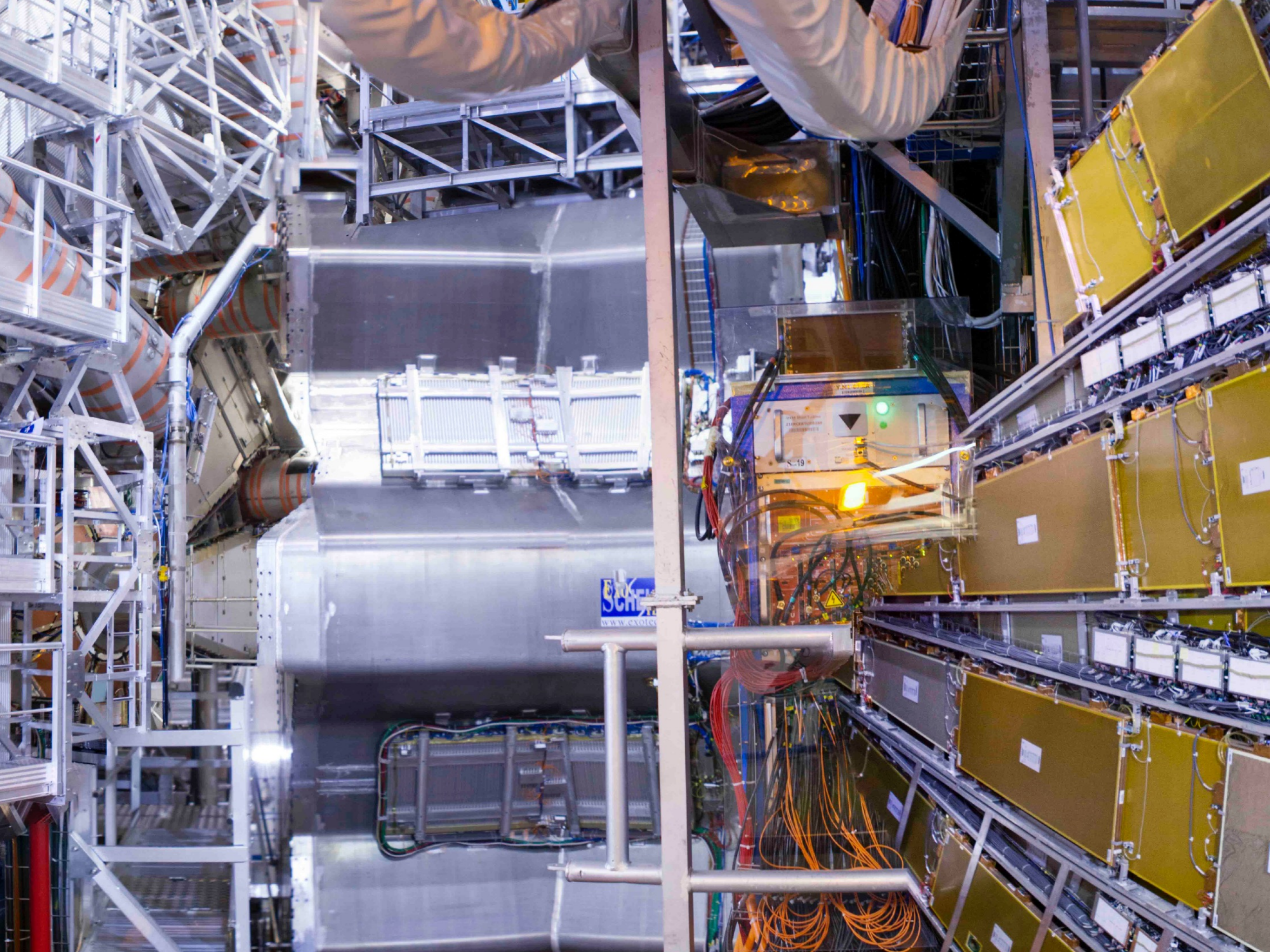


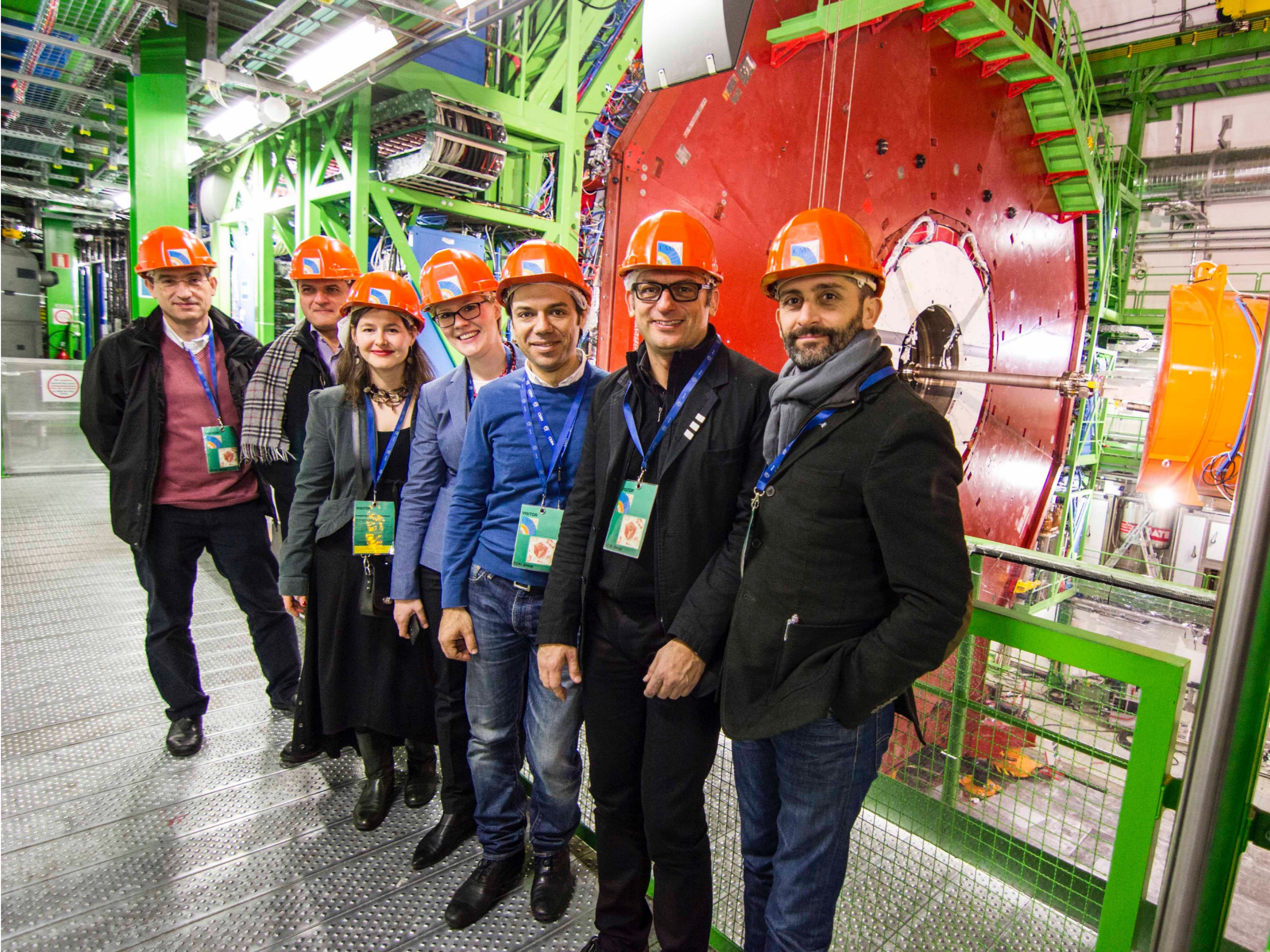


CBI

Challenge base innovation @ CERN

en colaboración con ESADE, UPC e Istituto Europeo di Design





Challenge Based Innovation



Objetivos



El objetivo del **Challenge Based Innovation** es llevar la ingeniería y la tecnología de vanguardia al servicio de las personas para la resolución de problemas cotidianos.

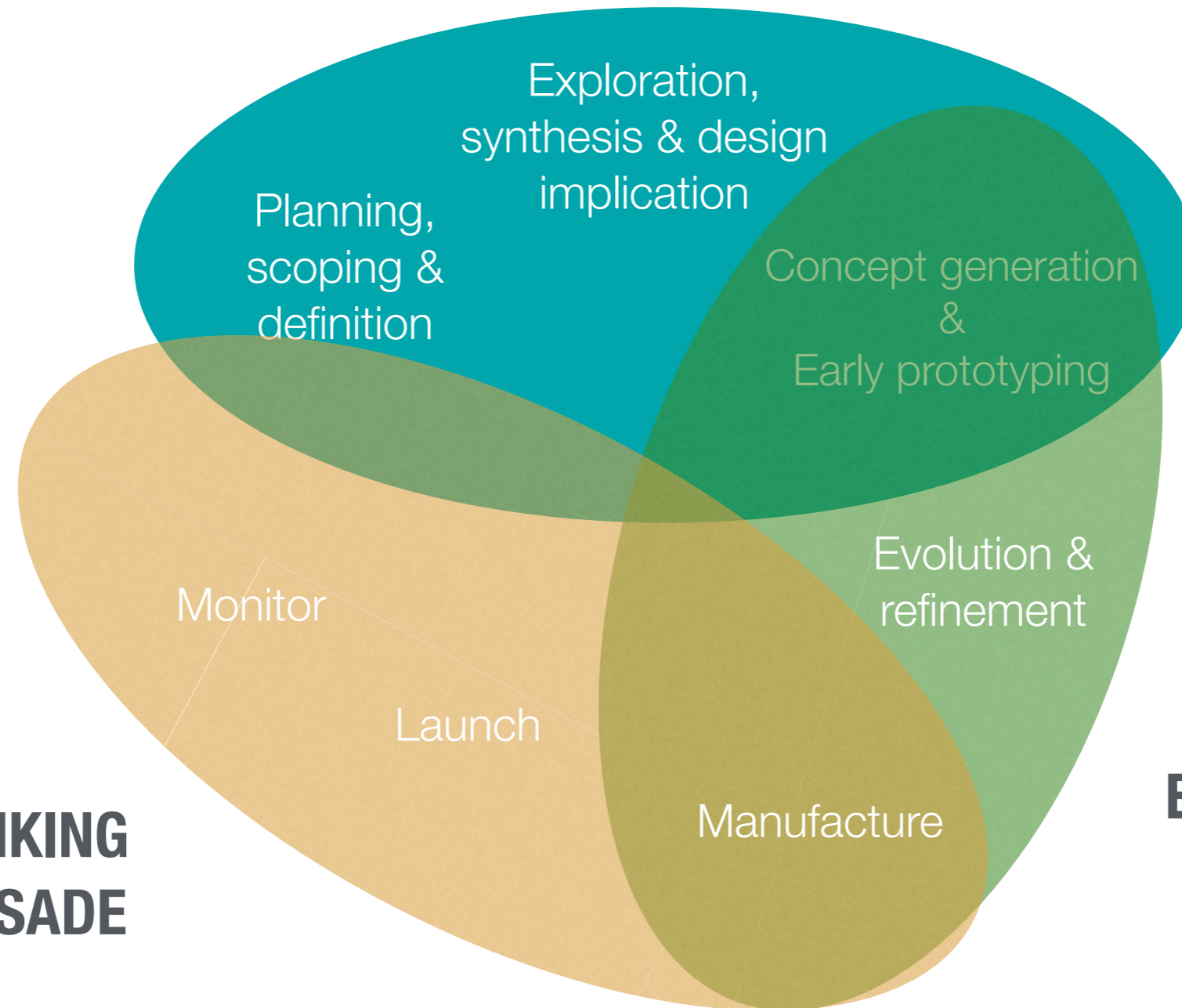
Objetivos

Los equipos de estudiantes han trabajado para:

- **aplicar** las tecnologías futuristas desarrolladas para la investigación en física cuántica en el CERN para generar impacto social en la vida cotidiana de las personas;
- **trabajar** como parte de un equipo multidisciplinar que combina las áreas del diseño, business e ingeniería;
- **implementar** y probar soluciones tangibles, en colaboración con investigadores del CERN;
 - **proponer** soluciones centradas en el usuario, USER EXPERIENCE;
- **desarrollar** modelos viables de implementaciones a través del conocimiento del negocio.

Design Process

DESIGN THINKING IED BARCELONA

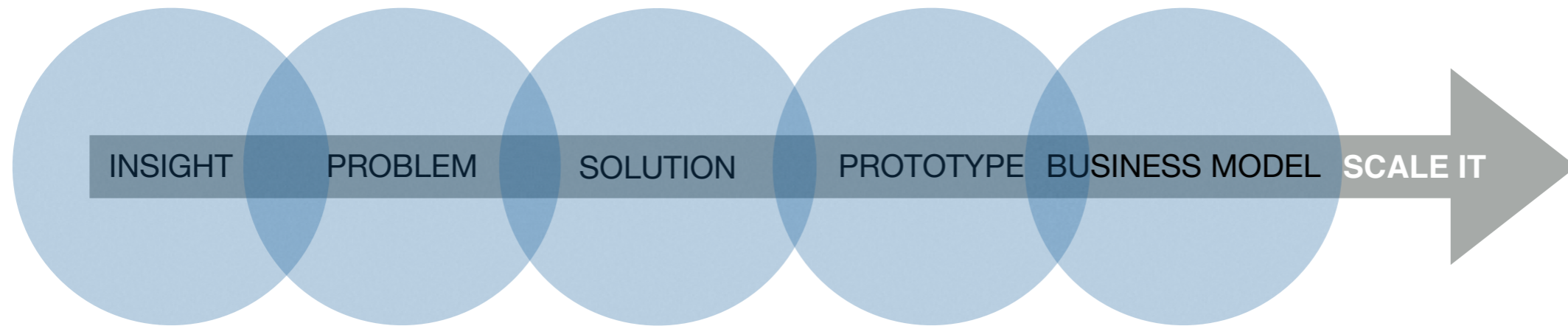


**BUSINESS THINKING
ESADE**

**ENGINEERING
THINKING
UPC**

inspired by Hannington & Martin 2012

Innovation Process



IED Barcelona

Creativity & Ideation

Open Innovation

Design Thinking

UPC

Technical Development

Lean startup

ESADE

Business model canvas

Calendario

Kickoff at CERN
e.g. 28.10.-8.11.

Development in home universities
e.g. 9.11.-24.2.

Wrap-up at CERN
e.g. 25.2.-7.3.



CERN



CERN



CERN



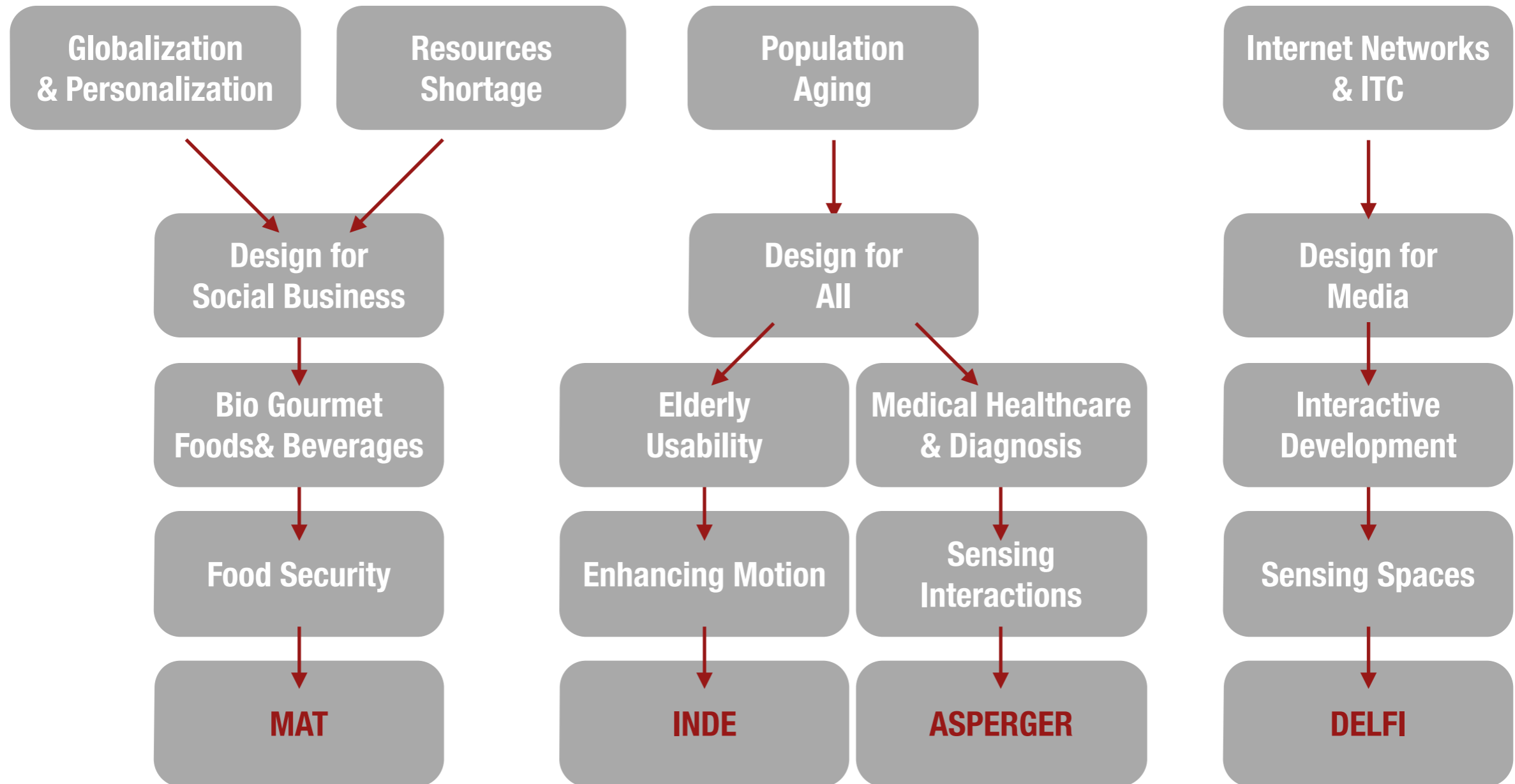
CERN



CERN



Macrotrends 2015-2020



Proyectos desarrollados

Sensing spaces

Team: Planck

Sensing interactions

Team: Schrödinger

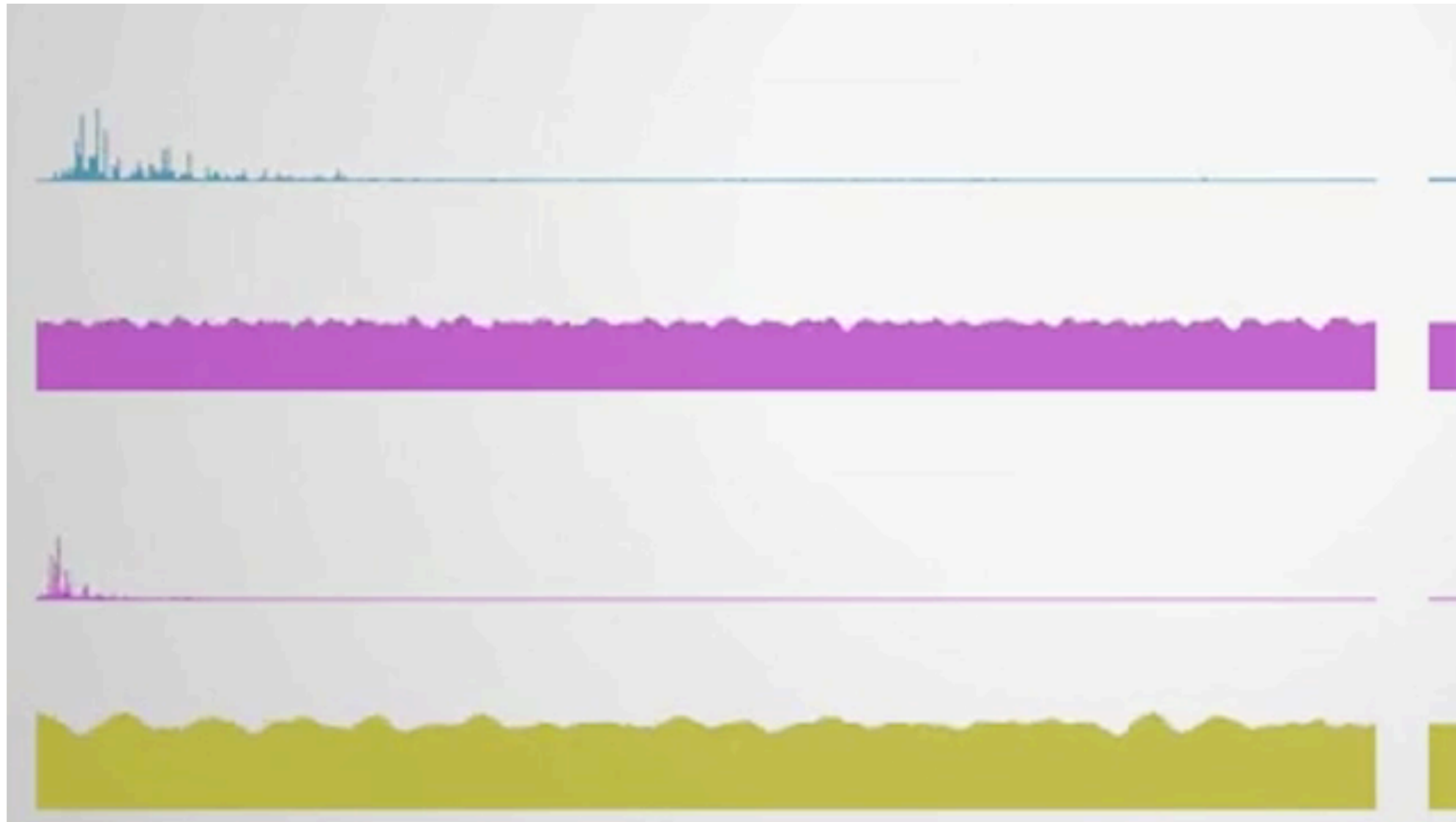
Enhancing motion

Team: Ampere

Food Security

Team: Faraday

Sensing Spaces



sound is everywhere and each one of us has an unique voice

Sensing Spaces

Sensing spaces es un dispositivo que permite de individuar y gestionar a distancia y a través del sonido, los problemas técnicos que se pueden verificar en los edificios.

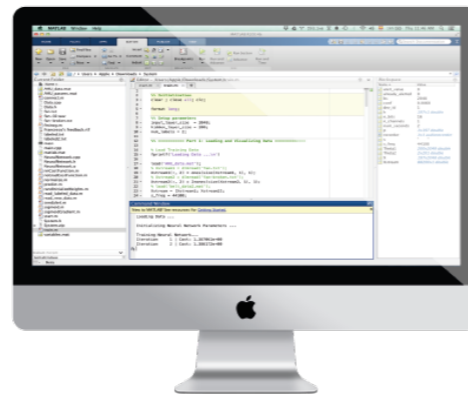
Sensing Spaces

Affordable Microphones:

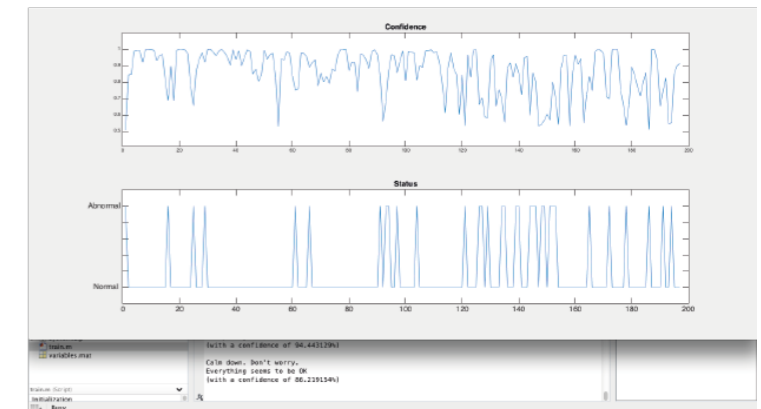
Continuously record sounds.



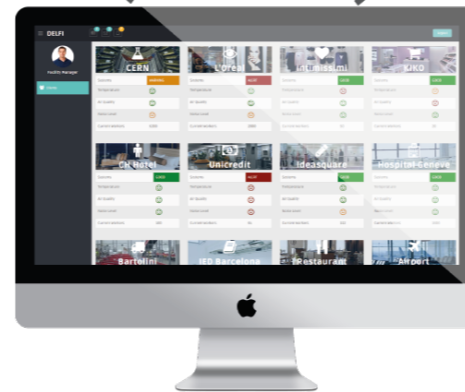
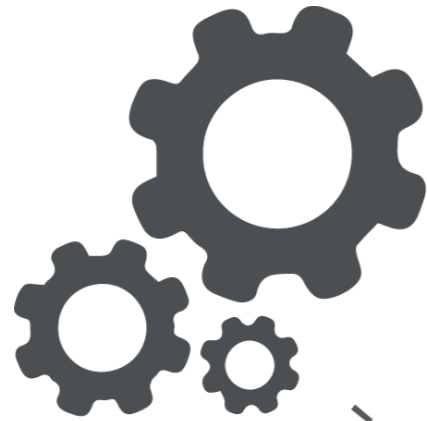
Neural Network:
Analyze the data to pinpoint features of the environment.



Identify anomalies:
Compare real-time data against these features to detect problems.



Sensing Spaces





Facility Manager

Clients

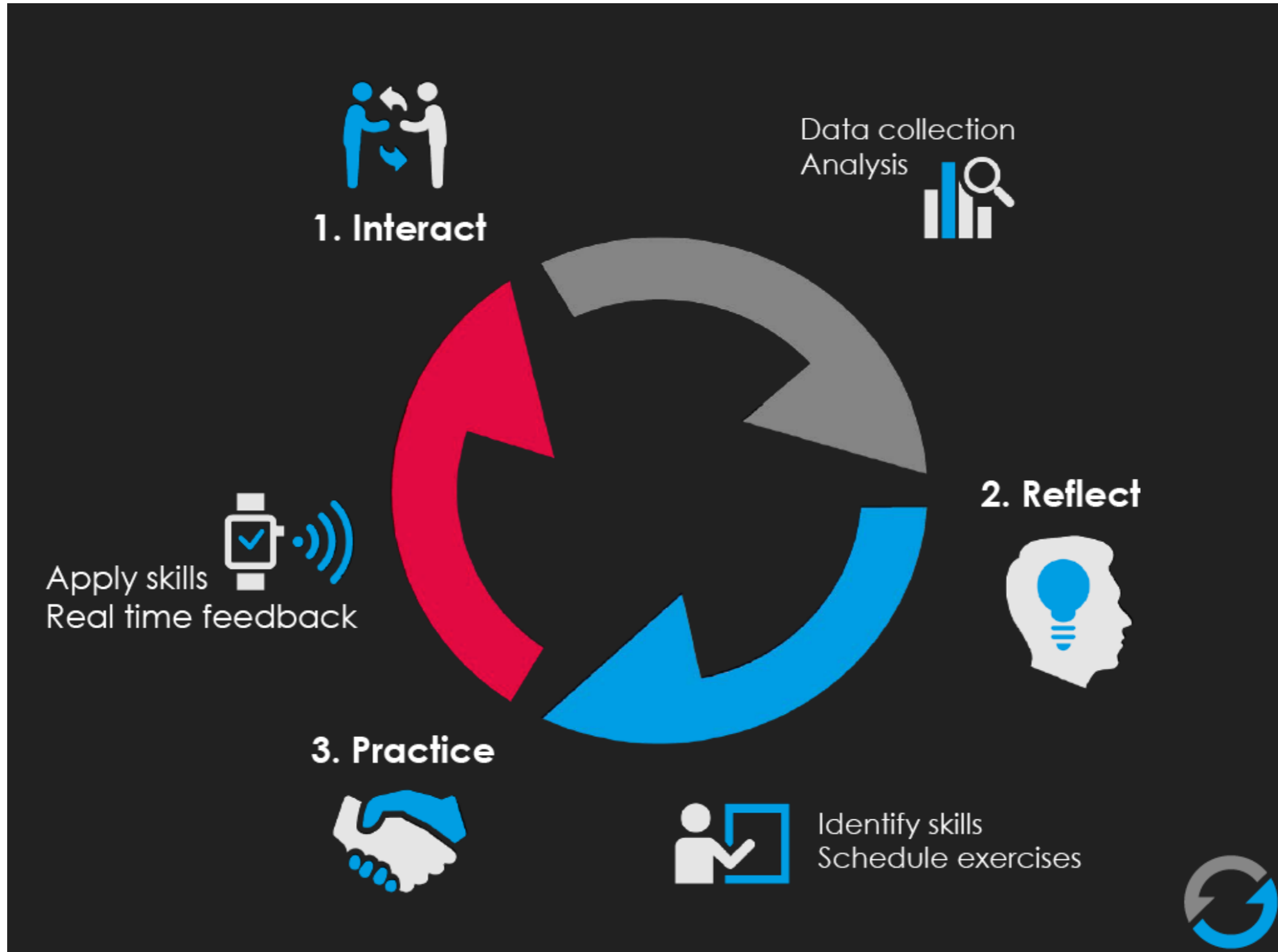
Client	Systems	Temperature	Air Quality	Noise Level	Current Workers
CERN	WARNING	😊	😊	😞	6200
L'Oreal	ALERT	😊	😊	😞	2000
Intimissimi	GOOD	😞	😊	😊	50
KIKO	GOOD	😞	😞	😊	20
CH Hotel	GOOD	😊	😊	😊	100
Unicredit	ALERT	😞	😞	😞	64
Ideasquare	GOOD	😊	😊	😞	112
Hospital Geneve	GOOD	😊	😊	😊	1500

Facility Manager Interface

Sensing Interactions

Sensing interactions es un sistema que nace con el objetivo de ayudar a las personas que sufren la síndrome de Asperger a interactuar socialmente.

Sensing Interactions



Sensing Interactions



Sensing Interactions



Identify skills for improvement

Schedule training exercises

2. Reflect

Sensing Interactions



Inde

Enhancing Mobility

Inde es una falda equipada con un sistema capaz de detectar una posible caída evitando las fracturas en las caderas típicas de las mujeres que sufren osteoporosis.

Inde

Enhancing Mobility

Europe now



Inde

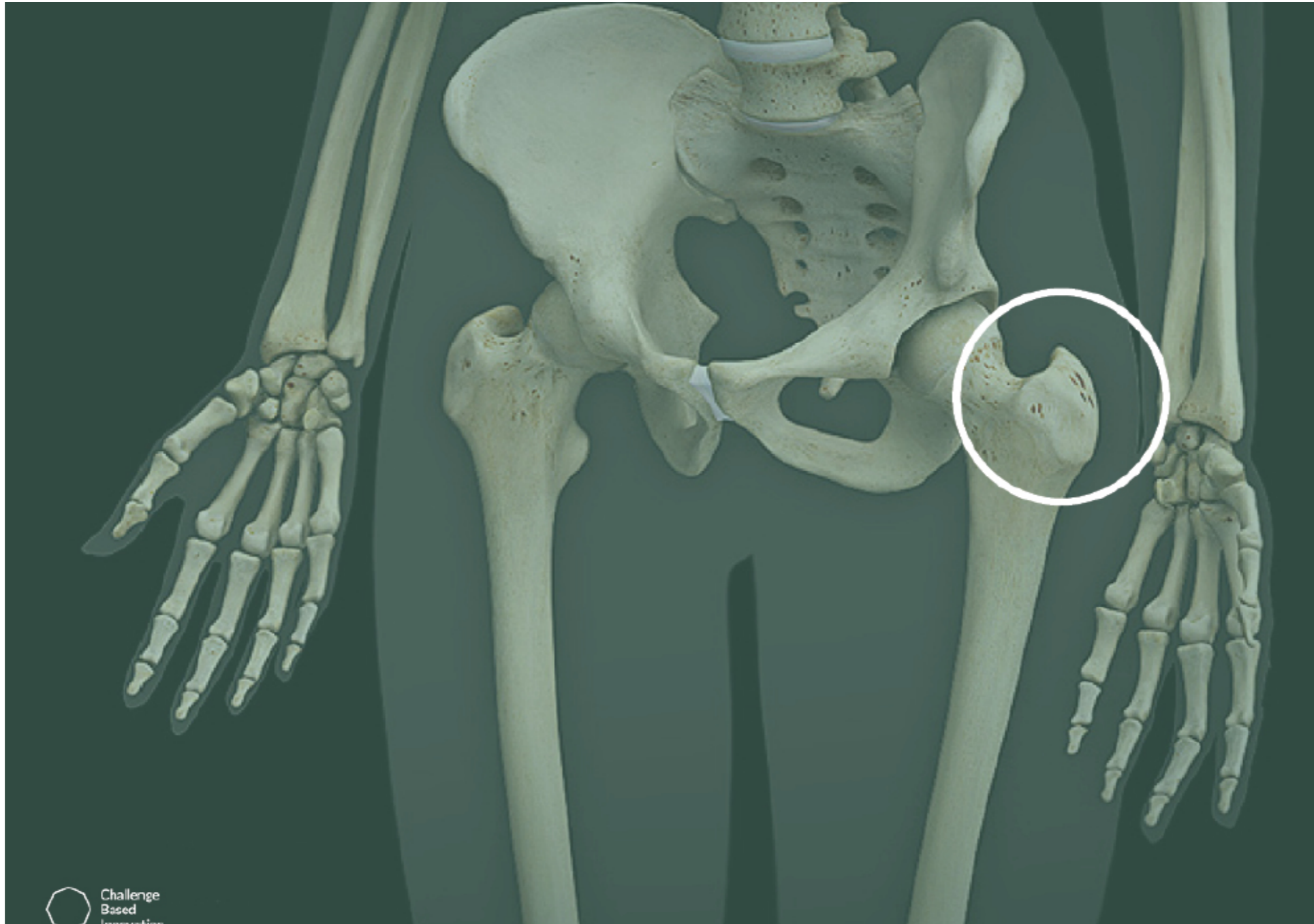
Enhancing Mobility

Europe in 2050



Inde

Enhancing Mobility



Inde

Enhancing Mobility



Inde

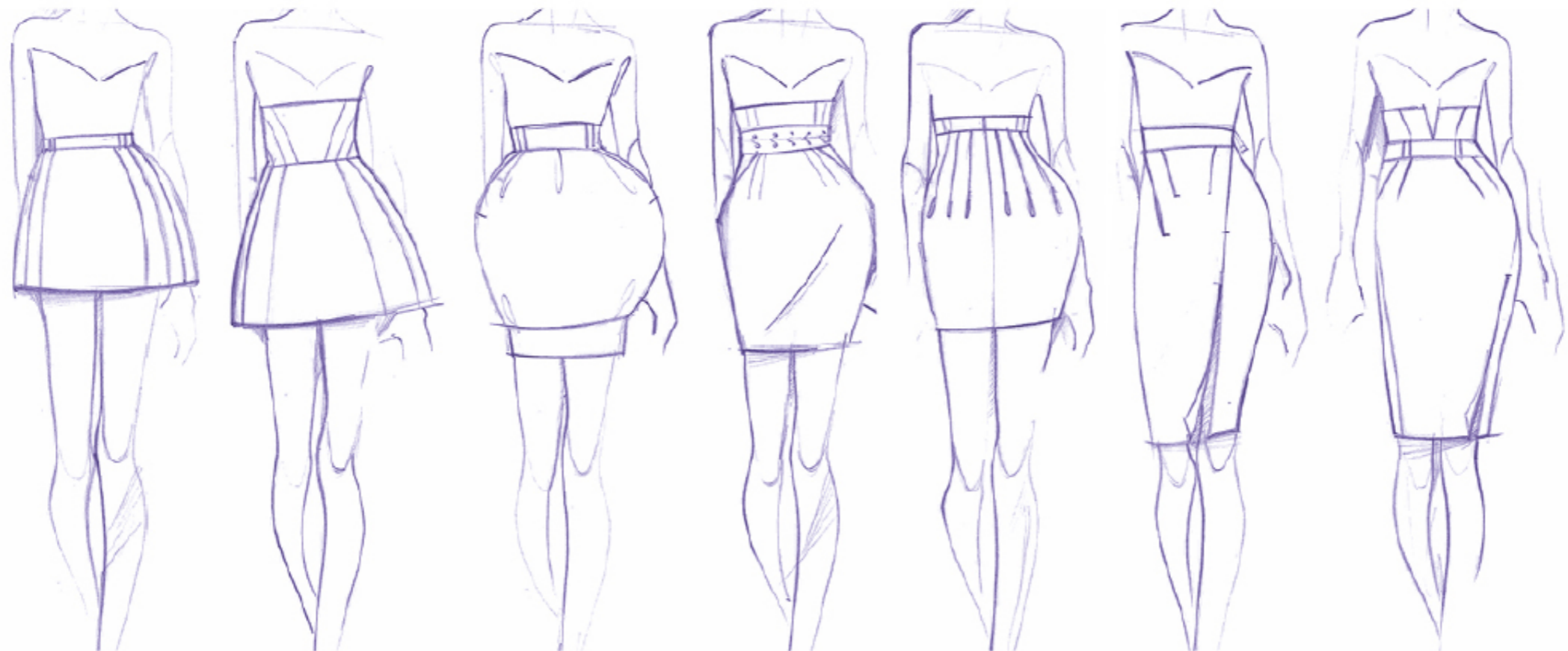
Enhancing Mobility



hip protectors
hard to wear

Inde

Enhancing Mobility



Inde

Enhancing Mobility



Inde

Enhancing Mobility

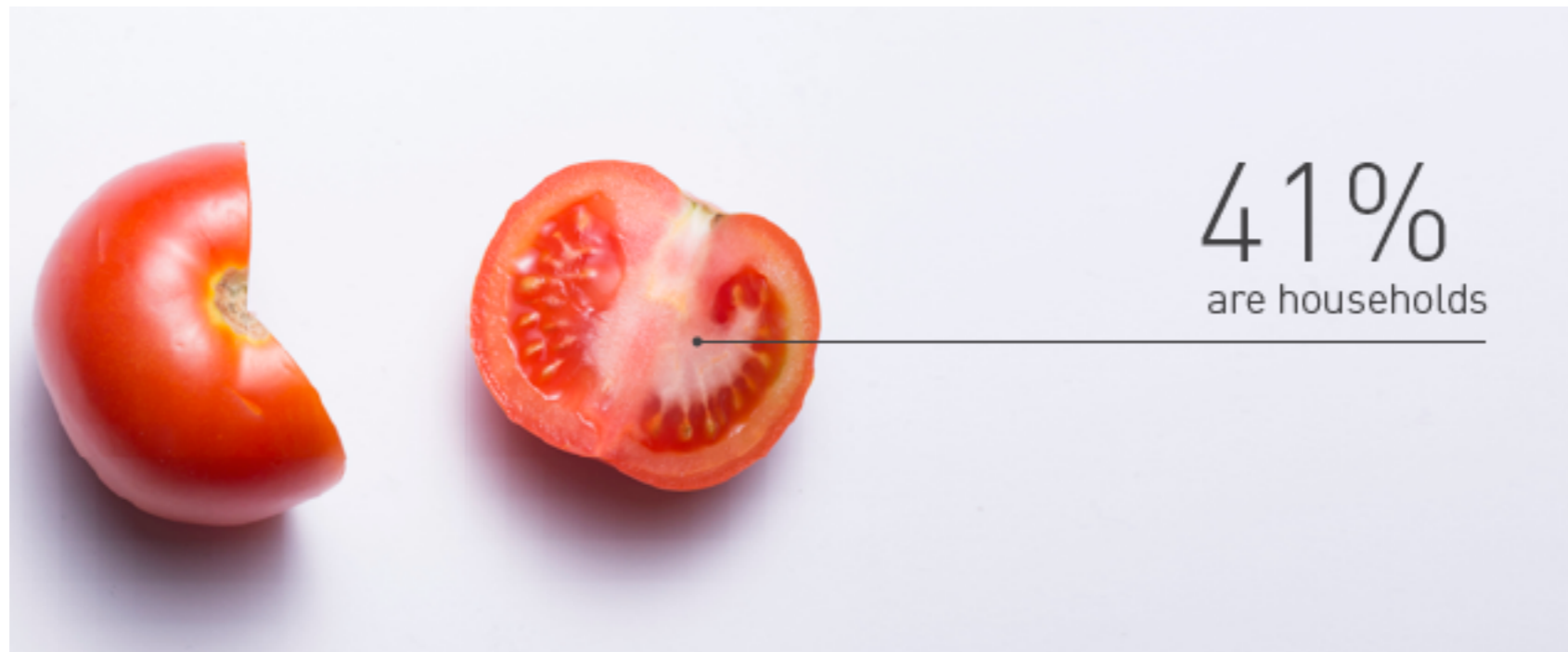


MAT Food security es un dispositivo creado para reducir el desperdicio de los alimentos en los hogares domésticos.

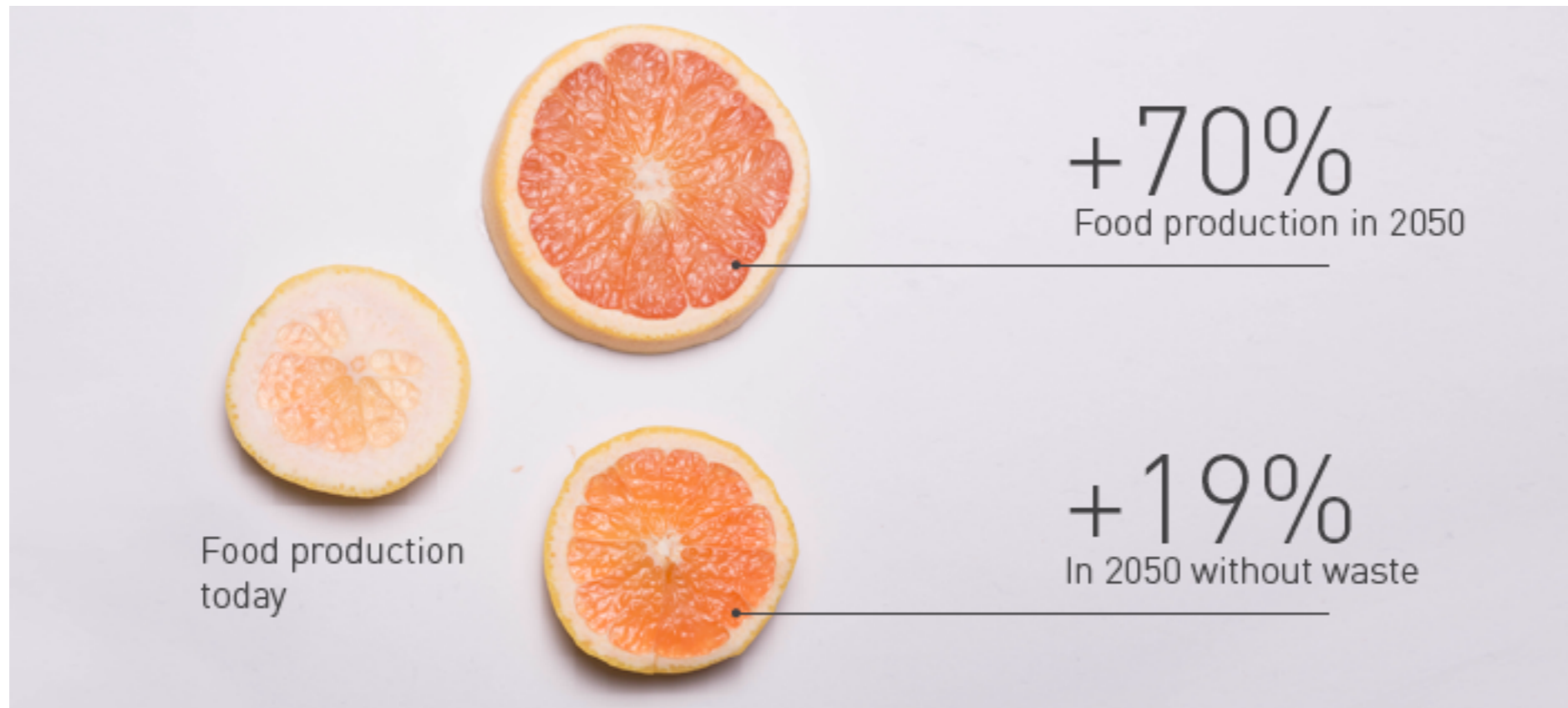
How much of the food produced globally is **wasted**?

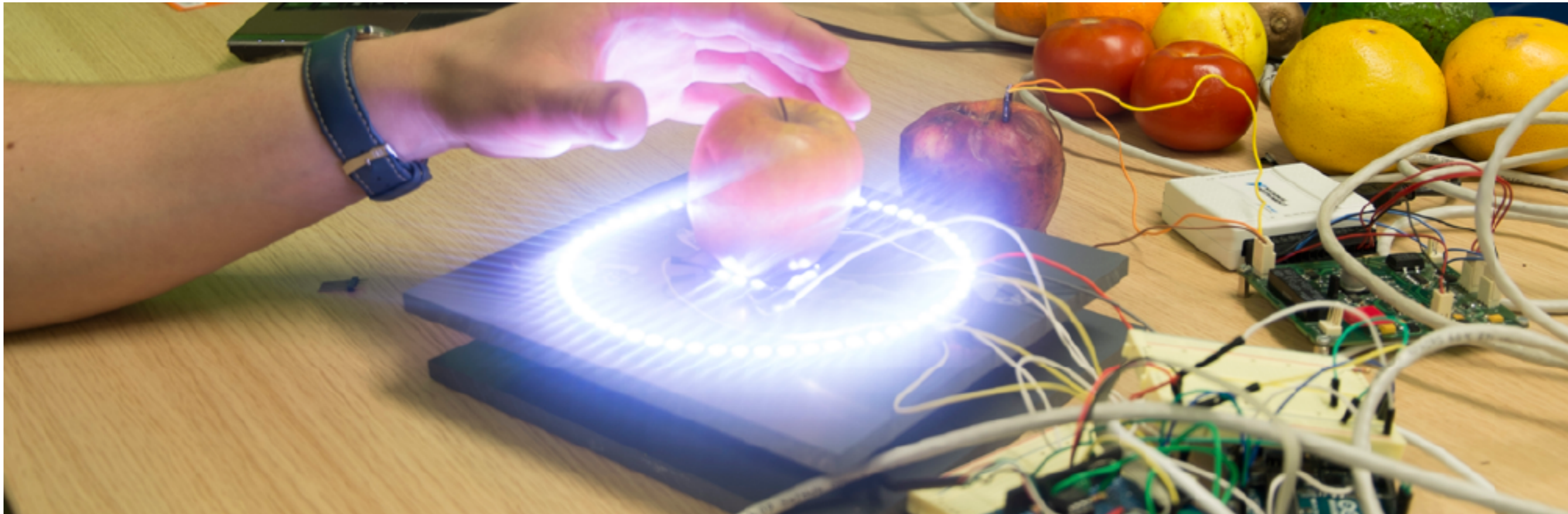


Who wastes most of the edible food?



Why is **food wasted** a problem?





MAT

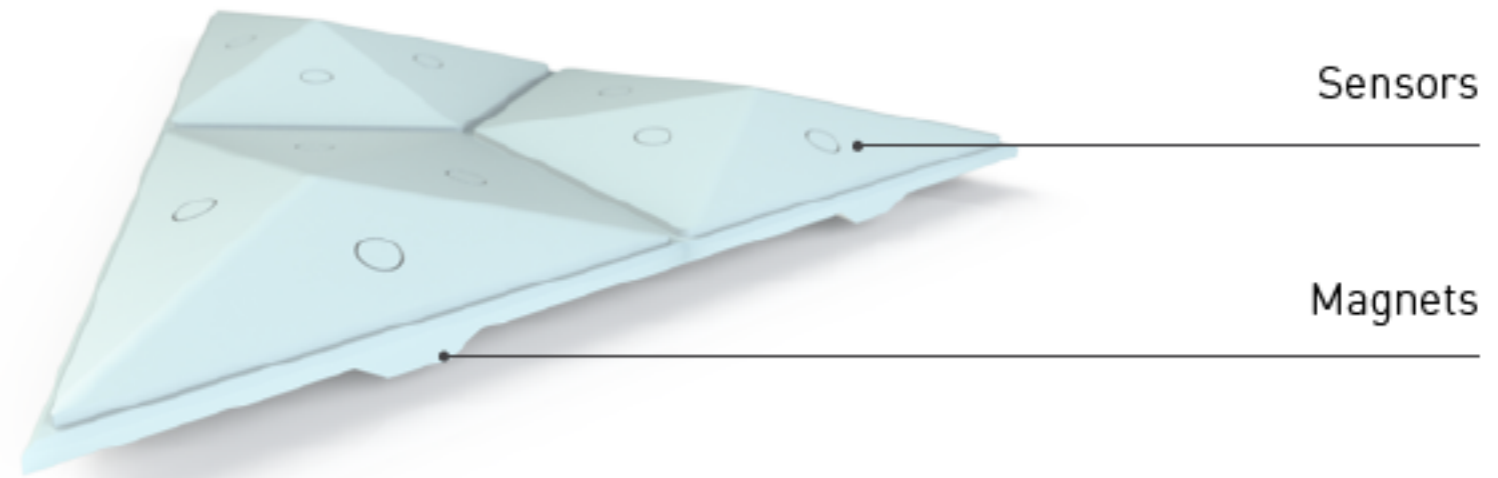


MAT



MAT

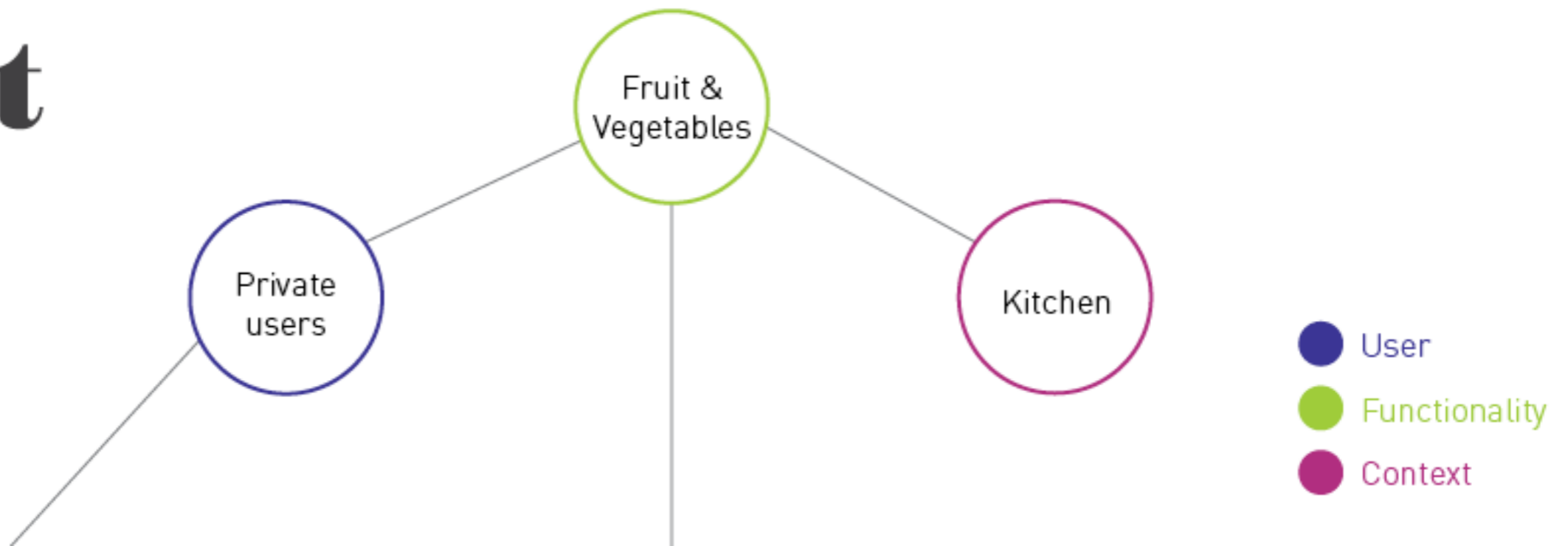
mat
MODULES



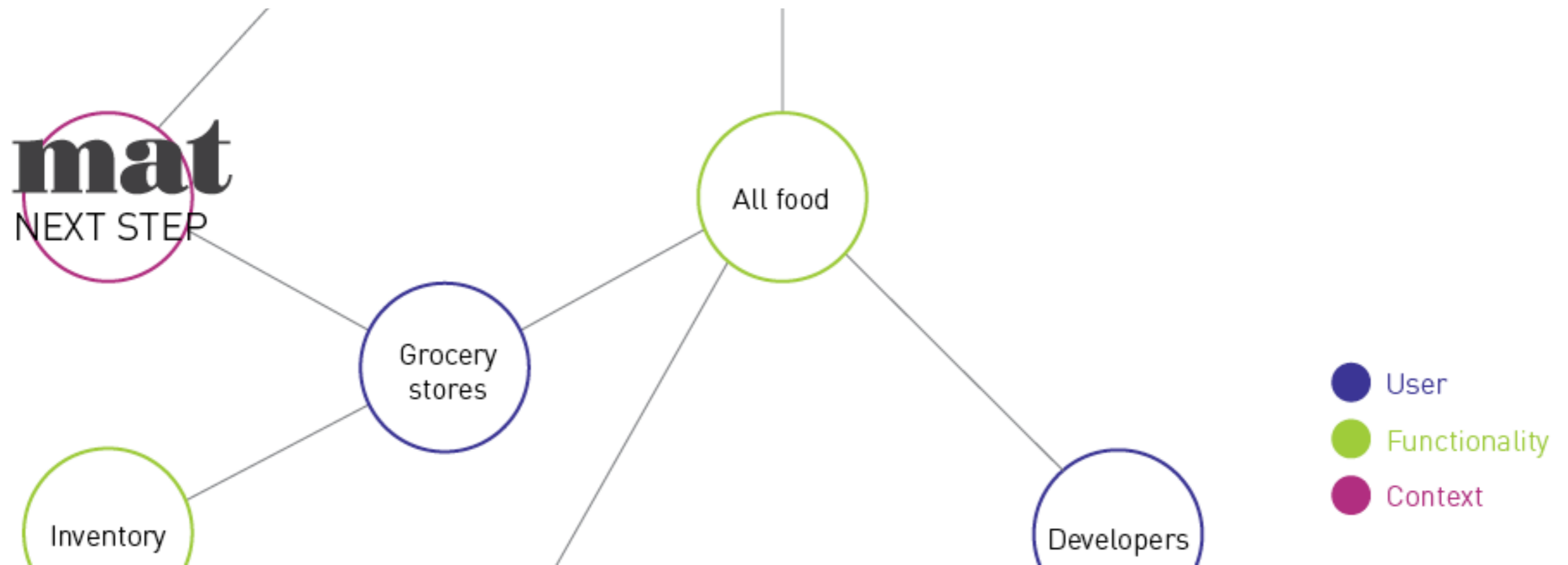
Sensors

Magnets

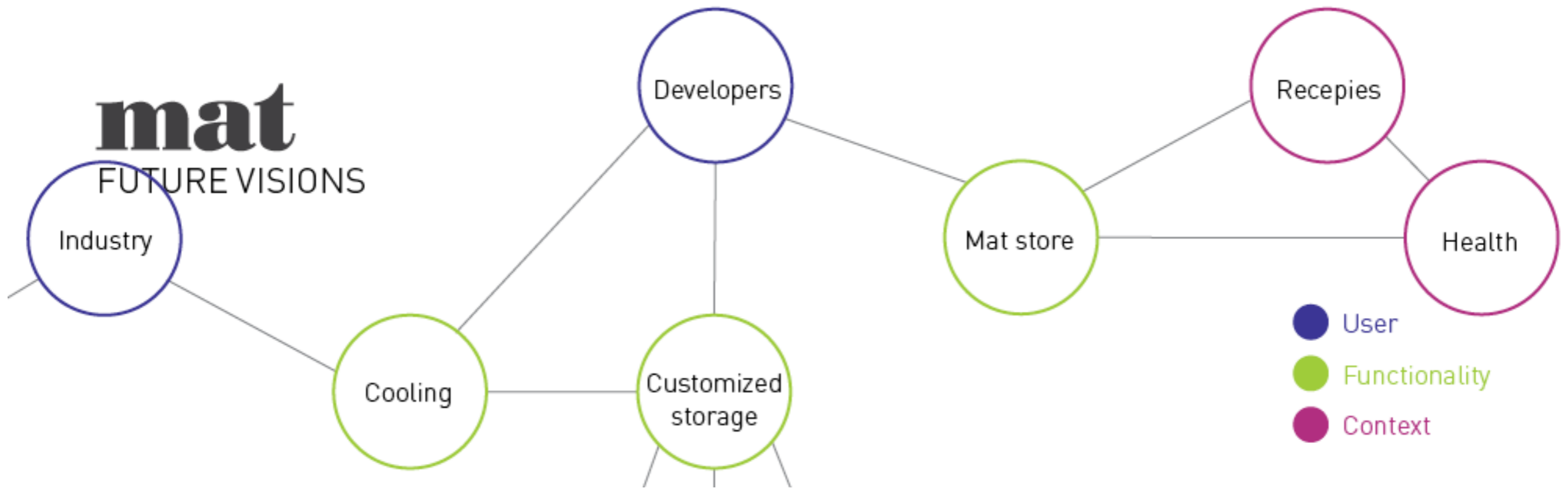
mat
TODAY

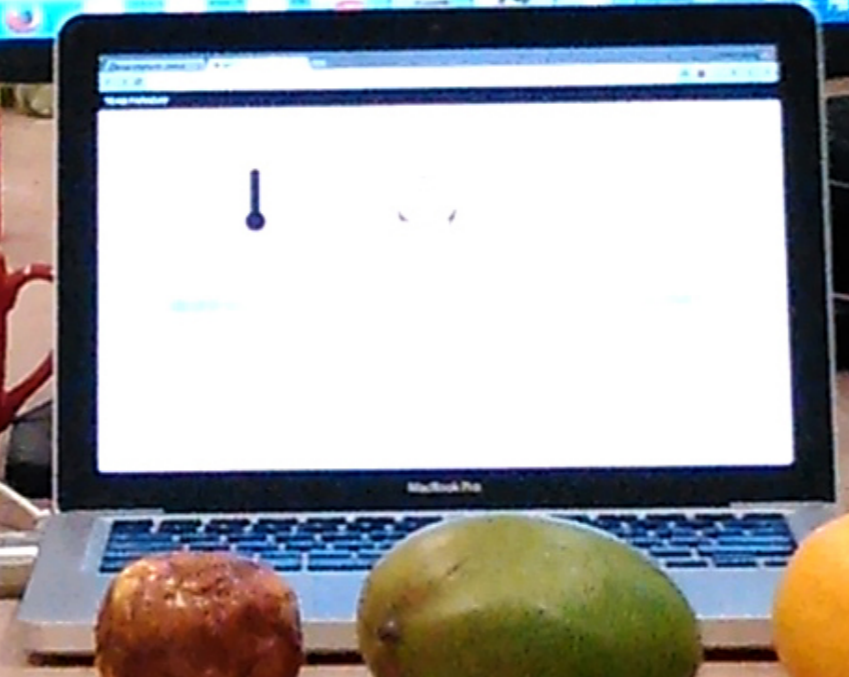


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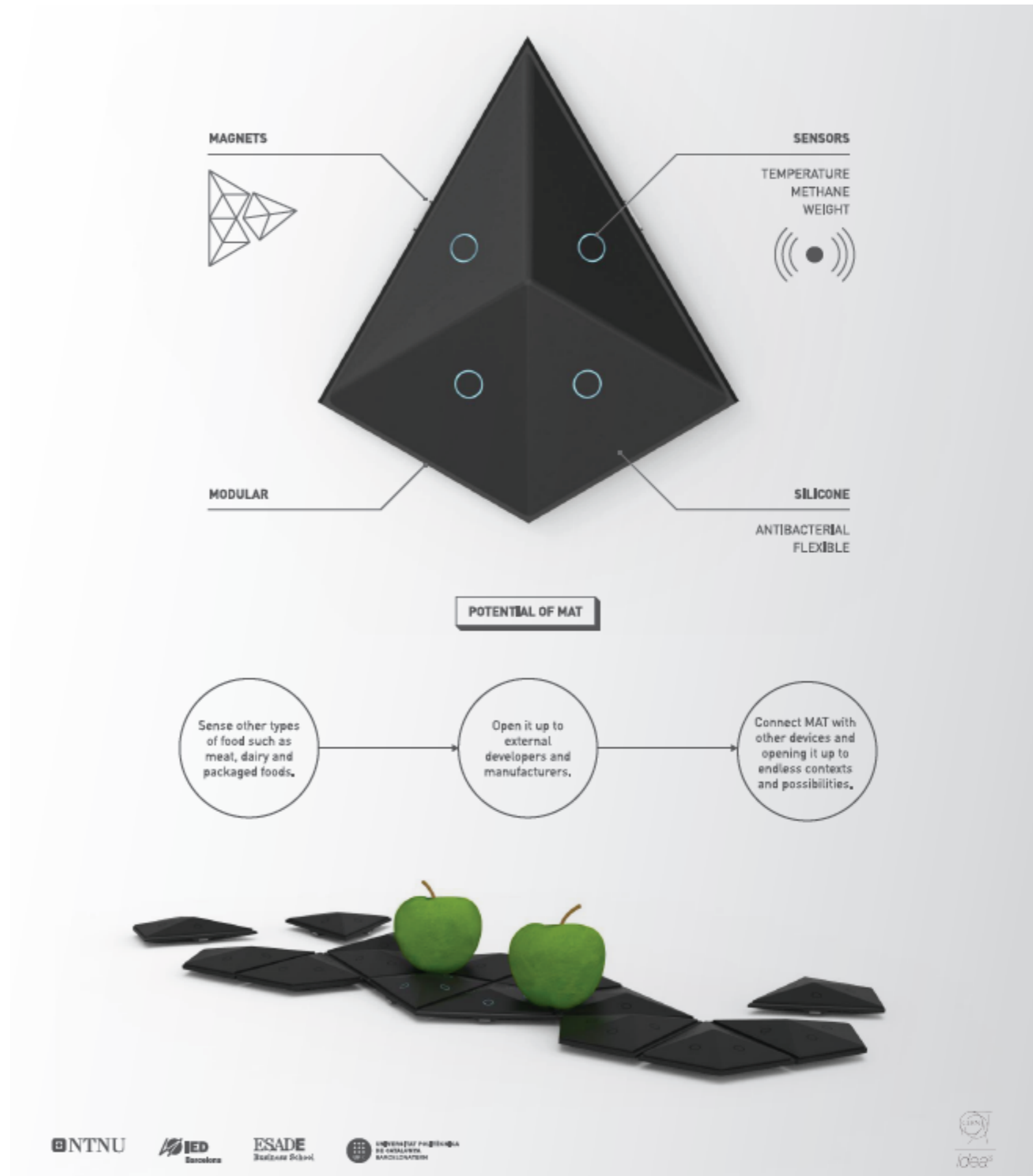
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MAT





¡Gracias!

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Malaga 15 octubre 2015