

RESEARCH PROJECT
SURVEY REPORT



FUTURE DESIGN PACKAGING

THE FUTURE OF PACKAGING DESIGN
TOWARDS A SMART AND SUSTAINABLE ERA



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
DEPARTMENT OF ARCHITECTURE



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
DIPARTIMENTO DI ARCHITETTURA
DIPARTIMENTO DI ECCELLENZA MIUR
(L.232 DEL 1/12/2016)

1. THE PREMISES, THE CONTEXT
AND THE RESEARCH OBJECTIVES
2. THE RESEARCH PROCESS:
A GLIMPSE AT A CHANGING WORLD
3. SURVEY OF MAIN DRIVERS FOR PACKAGING SECTOR
4. NEXT STEPS OF FUTURE DESIGN PACKAGING



1.

THE PREMISES, THE CONTEXT AND THE RESEARCH OBJECTIVES

THE PREMISES AND THE GLOBAL CONTEXT

- 1) Unsustainable use of resources
- 2) Rapid changes at a regulatory level
- 3) Rapid evolution of enabling technology
and digital production/distribution processes
- 4) Increasing people's engagement
for environmental issues



HOW THIS RESEARCH WAS CARRIED ON

- We explored the packaging industry along the **entire value chain.**

- Secondly, we considered DESIGN as a whole: PROCESS, PRODUCT and SERVICE.

Observation of the **Product-Service-System**

DESIGN AS A MEDIATOR*

- 1) Design as a **tool** capable of **redesigning packaging according to circularity criteria**
- 2) Design as a tool to support an **innovative packaging industry** (functionalization of Packaging through the integration of digital technologies)
- 3) Design as a **communication mean** for a widespread **sustainable culture**

* Celaschi, F. (2008). Il design come mediatore tra bisogni.
In: C. Germak (Ed.), L'uomo al centro del progetto. Torino, Italia: Allemandi.

RESEARCH OBJECTIVES

- Exploring the **extended role of Design** in the Packaging Industry
- Exploring the **extended role of packaging in our life**
- Offering a first interpretation of the data collected, identifying **Main Drivers**
- Creating a **Permanent Observatory** on Packaging Design, “a network of specialised networks”

2.

THE RESEARCH PROCESS: A GLIMPSE AT A CHANGING WORLD

MULTIDIMENSIONAL FACTORS for the case studies selection

- Marketed products and research projects
- Relation with design-led drivers
- Type of organization and geographical location
- Quality and quantity of the information available
- Economic impact of solutions
- Type of project reported:
 - > disciplinary areas
 - > tools and methods adopted



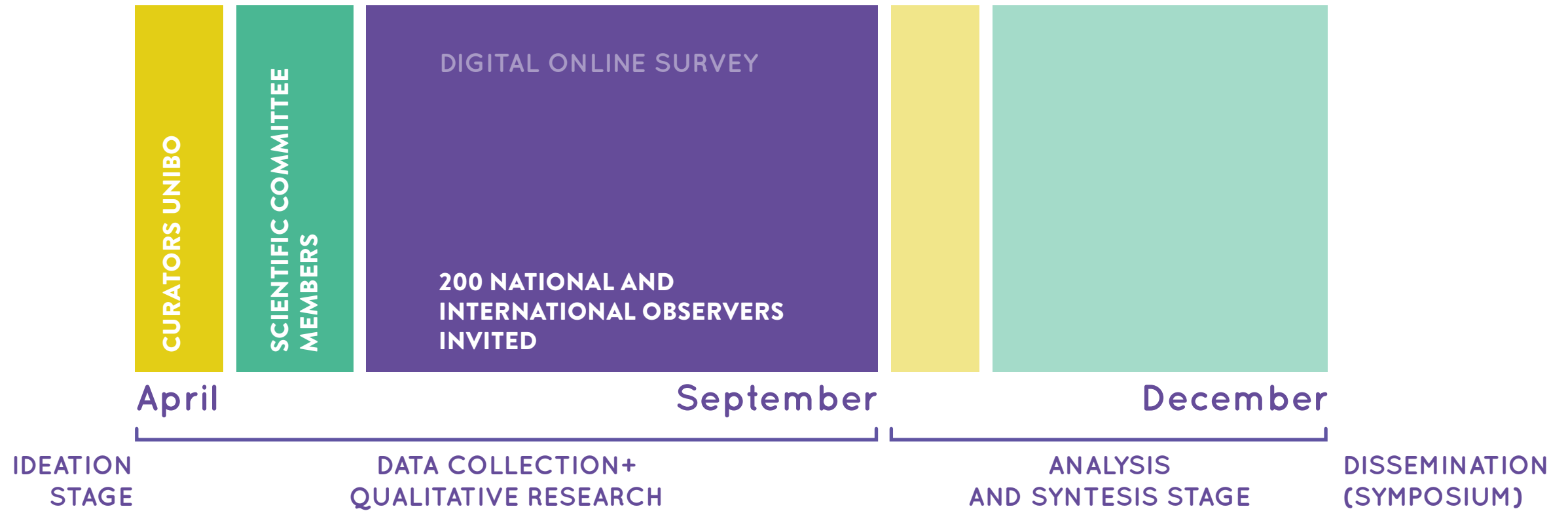
LIMITS AND SHORTCOMING

NOT a ranking or a taxonomy that distinguishes excellence and non excellence.

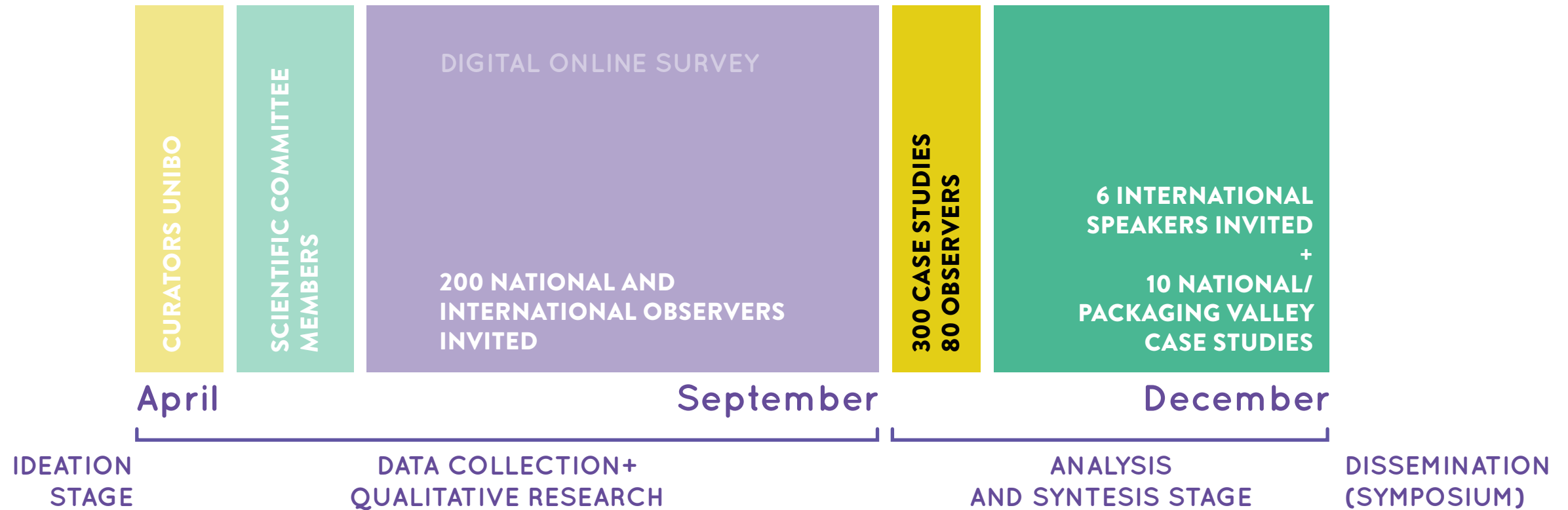
A GLIMPSE AT A CHANGING WORLD

The creation of a permanent and structured Observatory will overcome the limits of the research

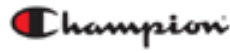
THE DATA COLLECTION



THE ANALYSIS AND SYNTHESIS



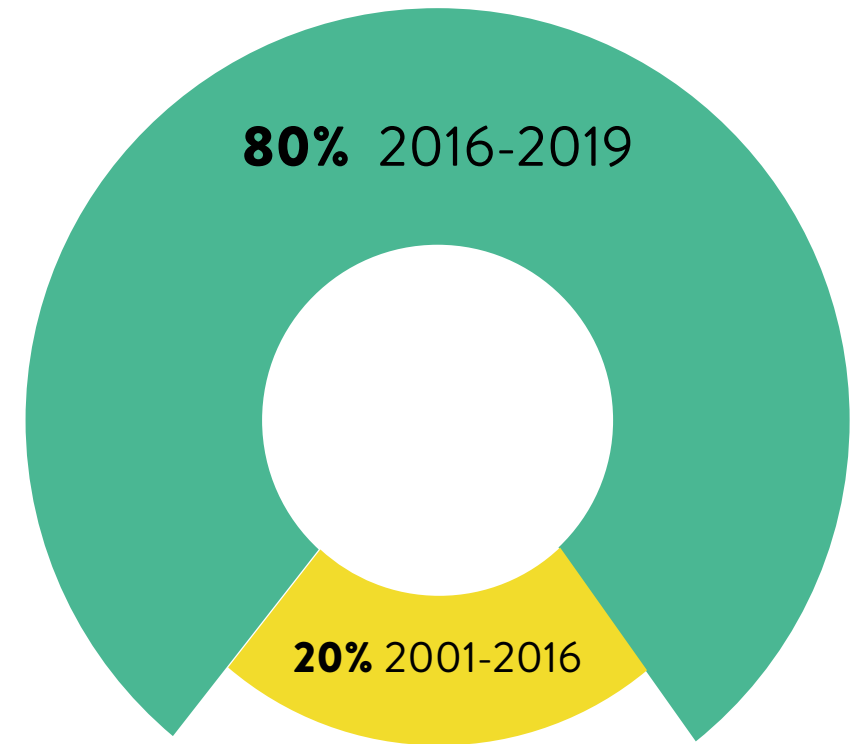
80 OBSERVERS



10 University
17 Companies
5 Design Firms
5 Consortia/Institutions
20+ Freelance/ Designer

325 CASE STUDIES (by October 1st 2019)

CASE STUDIES DEVELOPED BY



FUTURE
DESIGN
PACKAGING

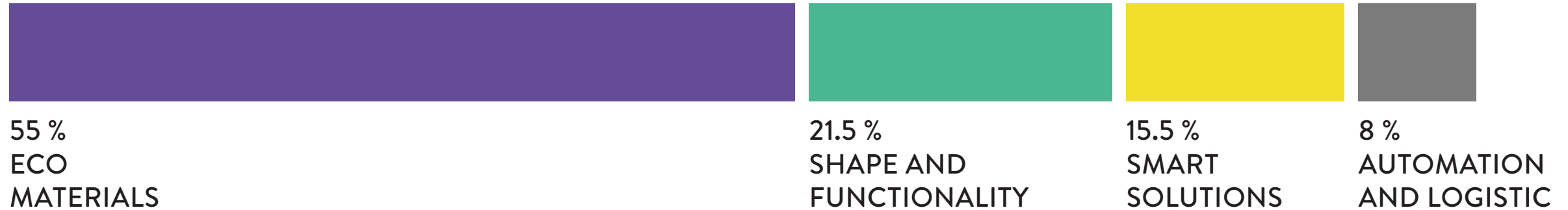
- 2% Design Firms
- 3.5 % Authorities / Public Institutions / Consortia
- 11 % Universities or Research Institutes
- 83.5 % B2B and B2C Companies / NGOs / start-ups

GEOGRAFICAL DISTRIBUTION OF CASE STUDIES



110 Europe (excl. Italy)
108 Italy (40 only from
Emilia Romagna)
84 Usa
7 Chile
6 China
5 Indonesia
4 Brazil
1 Greece

MAIN AREAS OF CASE STUDIES



SPECIFIC FEATURES OF CASE STUDIES



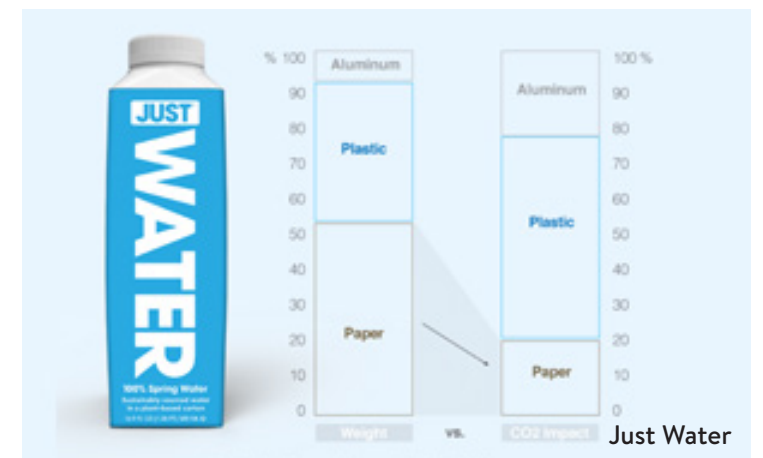
3.

SURVEY OF MAIN DRIVERS FOR PACKAGING SECTOR

1. (NEW) MATERIALS ARE GOLD

PILLARS


- ▶ Attention to **Materials Origin** and **Waste issue**
 - > BIODEGRADABLE/COMPOSTABLE/EDIBLE MATERIALS
 - > (PLASTICS/) MATERIAL REDUCTION
- ▶ Focus on **Overall Environmental Impact**
 - > RENEWABLE SOURCES
 - > CARBON, WATER OR ENERGY FOOTPRINT REDUCTION
 - > INCREASED DATA TRANSPARENCY





DESIGN ALERT #1

The design of packaging materials should take into account infrastructural and ecosystem aspects.



- > CAN THIS MATERIAL BE RECYCLED WITH THE EXISTING INFRASTRUCTURES?
- > WHAT IS THE ENVIRONMENTAL IMPACT OF THE OVERALL PRODUCTION PROCESS?

2. CLOSING THE LOOP

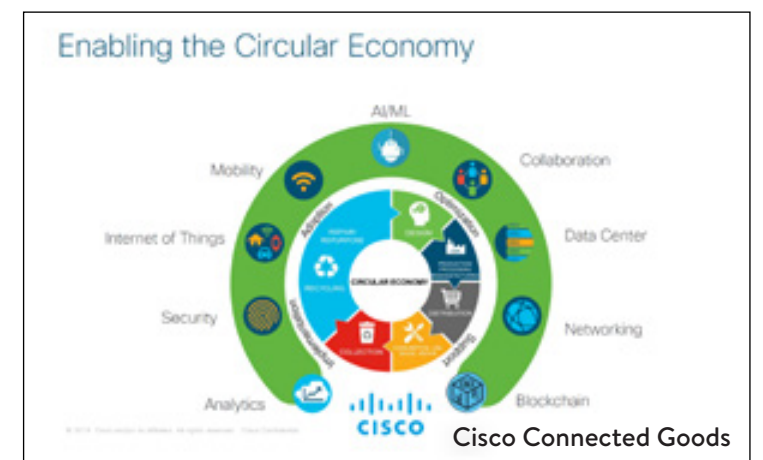
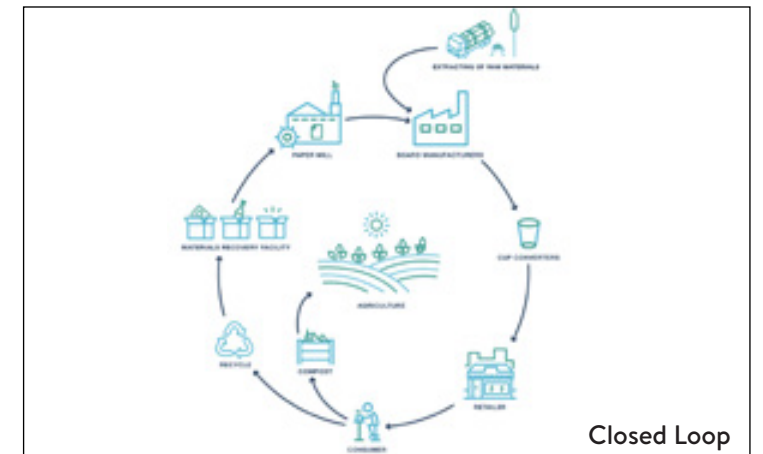
PILLARS

► **Shared Participation** in closing the circle

- > CONSUMERS HAVE AN ACTIVE ROLE TO PLAY
- > CIRCULARITY IS BASED ON COLLABORATION AMONG ACTORS IN THE SUPPLY CHAIN

► **Traceability** for Circularity

- > PACKAGING TRACKING ALONG THE SUPPLY CHAIN HELPS TO CREATE CIRCULAR PROCESSES





DESIGN ALERT #2

The packaging circular design should take into account gains and pains of all the players in the process.

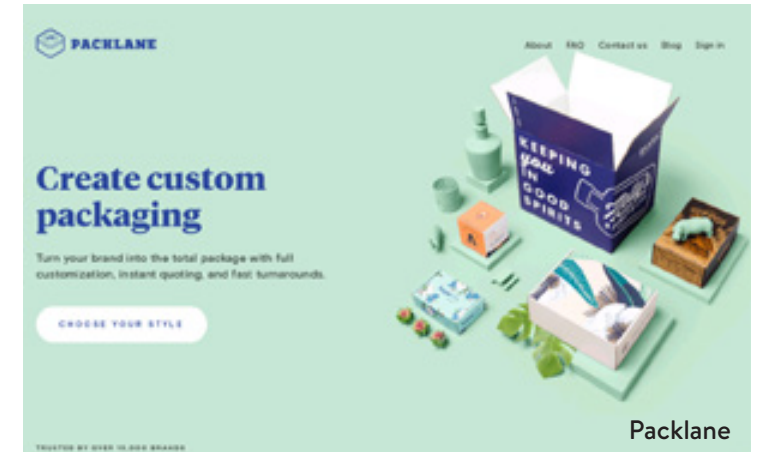
- > WHAT HAPPENS TO THE PLAYER WHO COME AFTER?
- > HOW CAN OTHER ACTORS SUPPORT MY JOB IN A CIRCULAR APPROACH?

3. SHAKING THE VALUE CHAIN

PILLARS

► Digital Revolution, Ecommerce and Start-up ecosystem have intertwined the value chain (**value web** or **value network**)

- > CONSUMER ENGAGEMENT EVEN BEFORE PRODUCTION (PROJECT CUSTOMIZATION)
- > DISTRIBUTION AND SHARING AS NEW ASSETS





DESIGN ALERT #3

Packaging, as a vector in the value-network,
should become chameleonic
(adaptable, customizable, refillable).

- > HOW WILL MY PACKAGED PRODUCT BE DISTRIBUTED?
- > HOW CONSUMERS, RETAILERS AND MANUFACTURERS COULD IMPROVE THE FLOW IN THE VALUE NETWORK?

4. LOGISTIC THINKING

PILLARS

► New and old players of value network needs to focus to **logistics as new competition element**

- > OPTIMIZATION OF THE RELATION AMONG PRIMARY, SECONDARY AND/OR TERTIARY PACKAGING
- > OPTIMIZATION OF STORE AND SHELF REPLENISHMENT
- > FOCUS ON THE LAST MILE





DESIGN ALERT #4

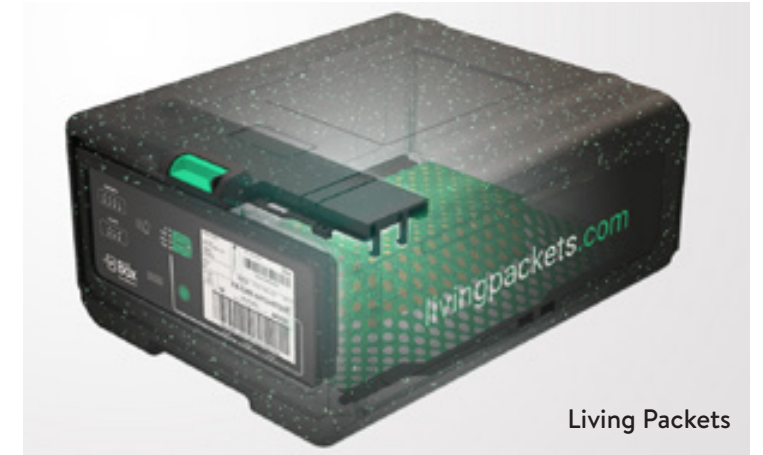
Packaging should be designed to maintain or improve logistics efficiency.

- > MY PACKAGING WILL BE MOVED BY A ROBOT? (IS IT “DRONE-ABLE”?)
- > IS MY PACKAGING EFFICIENT IN ALL CHANNELS?

5. TALKING PACKAGE

PILLARS


- ▶ Digital / AR-VR technologies, IoT, Smart labels transform the **package in a digital item**
 - > GREATER TRANSPARENCY, SECURITY AND SAFETY, RELIABILITY
 - > CONSUMER ENGAGEMENT ON THE PRODUCT EXPERIENCE





DESIGN ALERT #5

Packaging should be designed as
“digitally native”



- > WHAT DO I WANT TO MONITOR THROUGH PACKAGING?
- > WHAT KIND OF EXPERIENCE WILL MY PACKAGING BE ABLE TO PROVIDE?

6. PACKAGING AS A CHANNEL

PILLARS

- ▶ Packaging is **one of the channels** in omnichannel panorama
 - > MARKETING/BRANDING CHANNEL
 - > INFORMATION CHANNEL THROUGH LABELLING
 - > CULTURAL CHANNEL FOR ENVIRONMENTAL OR SOCIAL ISSUES



"Alto En" Chilean warning seals



Head&Shoulders
Beaches Plastic
Recyclable Packaging



Skipper Pride Edition



DESIGN ALERT #6

Packaging should be designed as a
powerful mass-medium

- > WHAT KIND OF MESSAGES I WANT TO SUPPORT AS A COMPANY?
- > HOW I ENSURE ALL THE PRODUCT INFO ARE EASILY ACCESSIBLE TO EVERYBODY?

#MAIN DRIVERS #DESIGN ALERT

1.

(New) Materials are gold

The design of packaging materials should take into account infrastructural and ecosystem aspects.

2.

Closing the loop

The packaging circular design should take into account gains and pains of all players in the process.

3.

Shaking the value chain

The packaging, as a vector in this value-network, has to become chameleonic (adaptable, customizable, refillable).

4.

Logistic Thinking

Packaging should be designed to maintain or improve logistics efficiency.

5.

Talking Package

Packaging should be designed as “digitally native”

6.

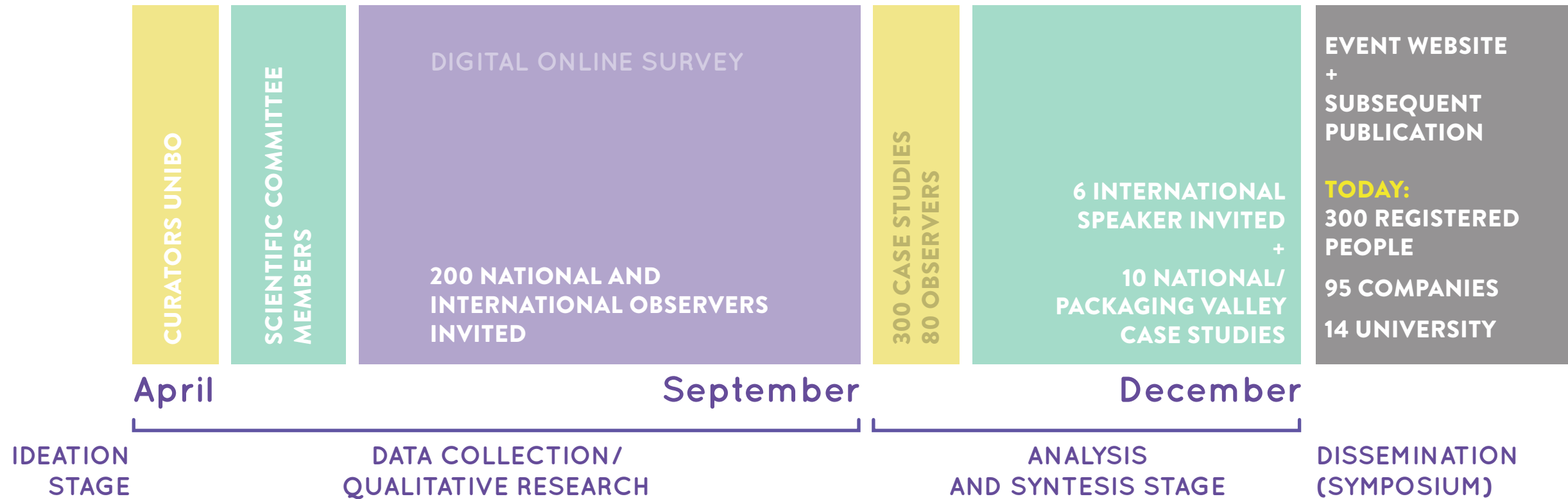
Packaging as a Channel

Packaging should be designed as a powerful mass-medium

4.

NEXT STEPS OF FUTURE DESIGN PACKAGING

THE DISSEMINATION STAGE



NEXT STEPS OF THE RESEARCH PROJECT

We want to continue the census of innovative case studies on a global scale and turn the information into in-depth analysis sheets



The Future of Packaging Design. Towards a Smart and Sustainable era

THE CASE STUDY

General information of the case study

Organization leading the case study

Your answer:

Organization Type

☐ University or Research Institute

☐ Private Company (> 500)

☐ Authority / Public institutions / Consortium

☐ Other

Location (e.g. London, UK): *

Your answer:

Short Review of the case study

Please provide some details of the Contact Person:

Full Name

Your answer:

Email

Your answer:

Telephone

Your answer:

Position/Responsibility in the Organization

Your answer:

002

Dual

037

Boomers

250

THE CREATION OF A PERMANENT OBSERVATORY ON PACKAGING DESIGN

“A network of specialised networks”

We want to generate and offer analytical and targeted contents to those who want to be part of the observatory



WHAT WILL THE OBSERVATORY OFFER TO ME?

Free Contents & Tools

- > LIGHT RESEARCH REPORTS
- > PERIODIC UPDATES (BLOG) AND MEETINGS (EVENTS)

Premium Products & Services

- > ANALYTICS AND FULL RESEARCH REPORTS
- > CUSTOMIZED RESEARCH STUDIES
- > WORKSHOPS AND KEYNOTES

CALL TO ACTION: THE OBSERVATORY IS YOU

Would you like **to collaborate** in the creation of the Permanent Observatory on Packaging Design?

Go to the desk and fill the form!
We will contact you to understand
how to tailor your collaboration

futuredesignpack@gmail.com



PERMANENT OBSERVATORY ON PACKAGING DESIGN

Would you like to **collaborate** in the creation of the Permanent Observatory on Packaging Design Innovation?

Would you be interested in receiving **periodic information** or **analytical studies** tailored to your company, created by the University of Bologna?

Leave us your details, **we will contact you** to discuss them together.

Le piacerebbe **collaborare** alla creazione dell'Osservatorio permanente sull'innovazione del packaging design?

Sarebbe interessato a ricevere **informazioni periodiche** o **studi analitici** su misura per la tua azienda, creati dall'Università di Bologna?

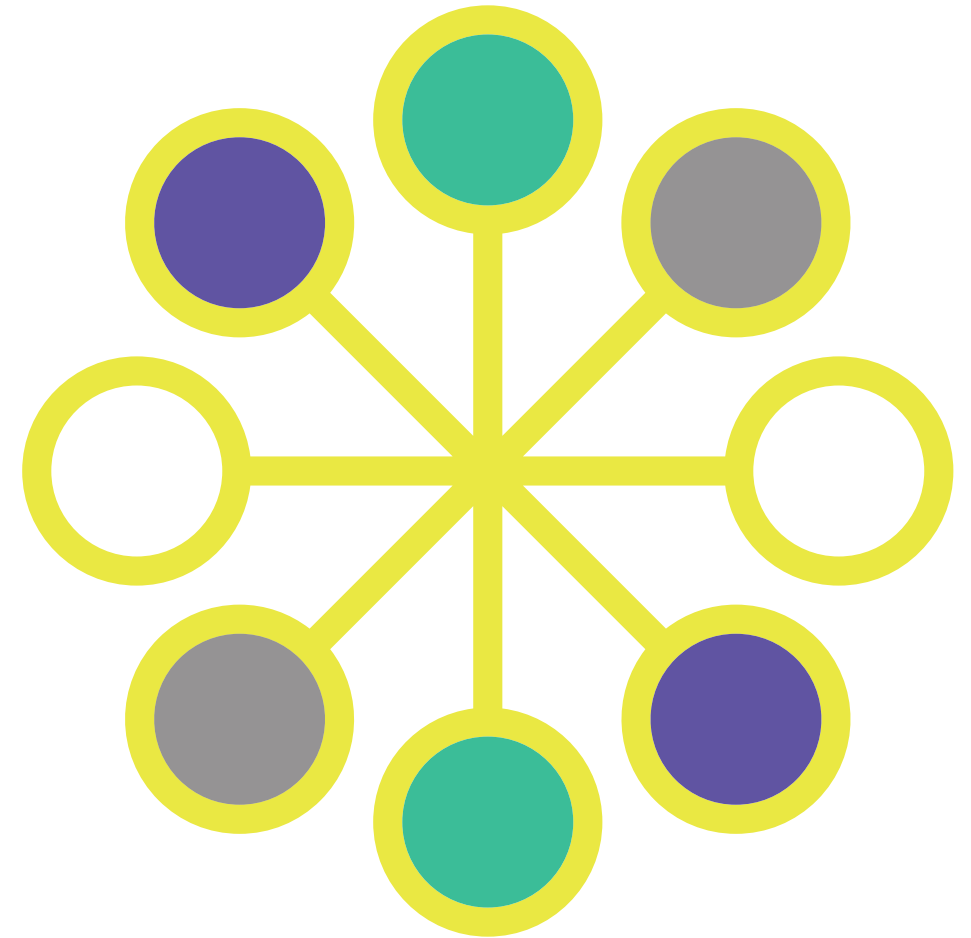
Lasci i suoi dati, **la contatteremo** per discuterne insieme.

Name
Surname
Email
Company

THANK YOU

“COMING TOGETHER IS THE BEGINNING.
KEEPING TOGETHER IS PROGRESS.
WORKING TOGETHER IS SUCCESS.”

HENRY FORD



INTERNATIONAL SYMPOSIUM

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Università di Bologna
Clara Giardina
Università di Bologna

Silvia Barbero
Politecnico di Torino
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Escuela de Diseño



RESEARCH PROJECT SURVEY REPORT

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Research Survey Curated by

Clara Giardina, Research Fellow - Università di Bologna

In collaboration with

Erik Ciravegna, Adjunct Professor - Pontificia Universidad Católica de Chile

Thanks to over 80 Italian and foreign observers

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