HAVE YOU EVER WONDERED WHAT IS THE JOURNEY OF THE FRUIT BEFORE YOU PICK IT UP FROM THE STAND?

L O O P

Thinking out of the box

ALMACUBE
EMPOWERING INNOVATORS
Alma Mater Studiorum - Università di Bologna

CPR SYSTEM
IL RISPARMIO INTELLIGENTE

FERRARIAE UNIVERSITAS · EX LABORE FRUCTUS · 13 91

ALMA MATER STUDIORUM A.D. 1088

UNIMORE
UNIVERSITÀ DEGLI STUDI DI MODENA E REGGIO EMILIA

Challenge Based Innovation

CERN Idea$

We are
Team Loop

The current

CPR SYSTEM

PRODUCE, SELL AND RENT OUT THE BOXES

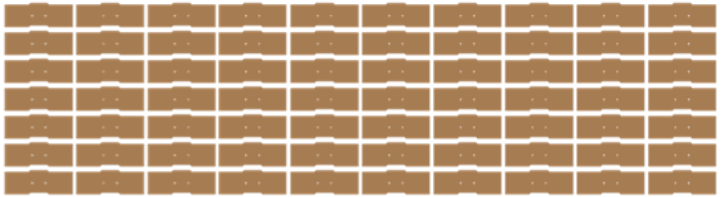
PROVIDE THE SERVICES OF

Washing the boxes

Repair the broken boxes

Recycle the destroyed boxes

REUSE IS MORE SUSTAINABLE THAN RECYCLE



CPR Polypropylene box

1 Box

10 Years

70 Cycles

Disposable cardboard box

70 Boxes

10 Years

1 Cycle

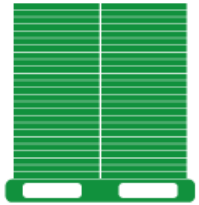
Producer

CPR SYSTEM
IL RISPARMIO INTELLIGENTE

Center of Distribution

Supermarket

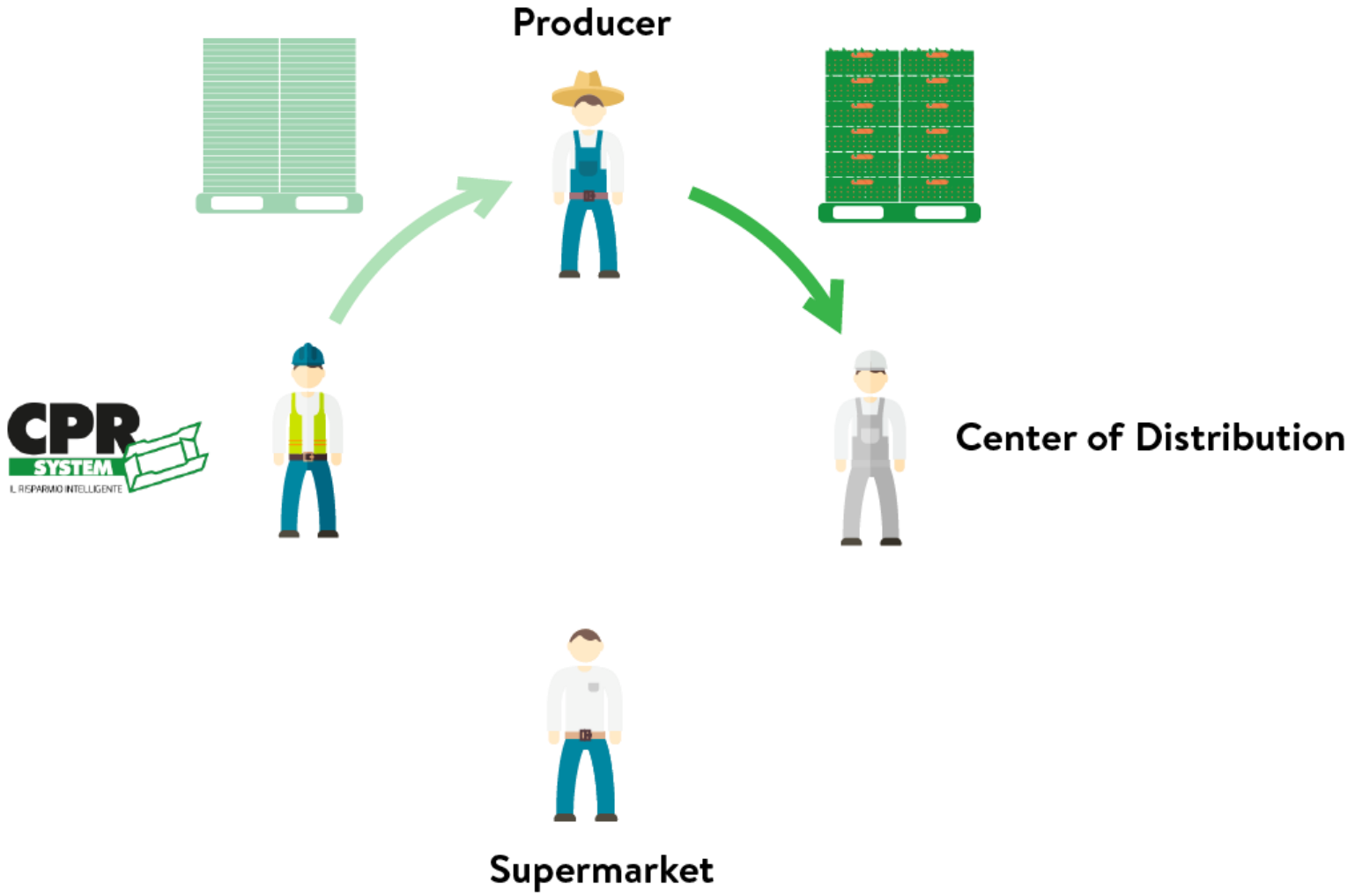
Producer

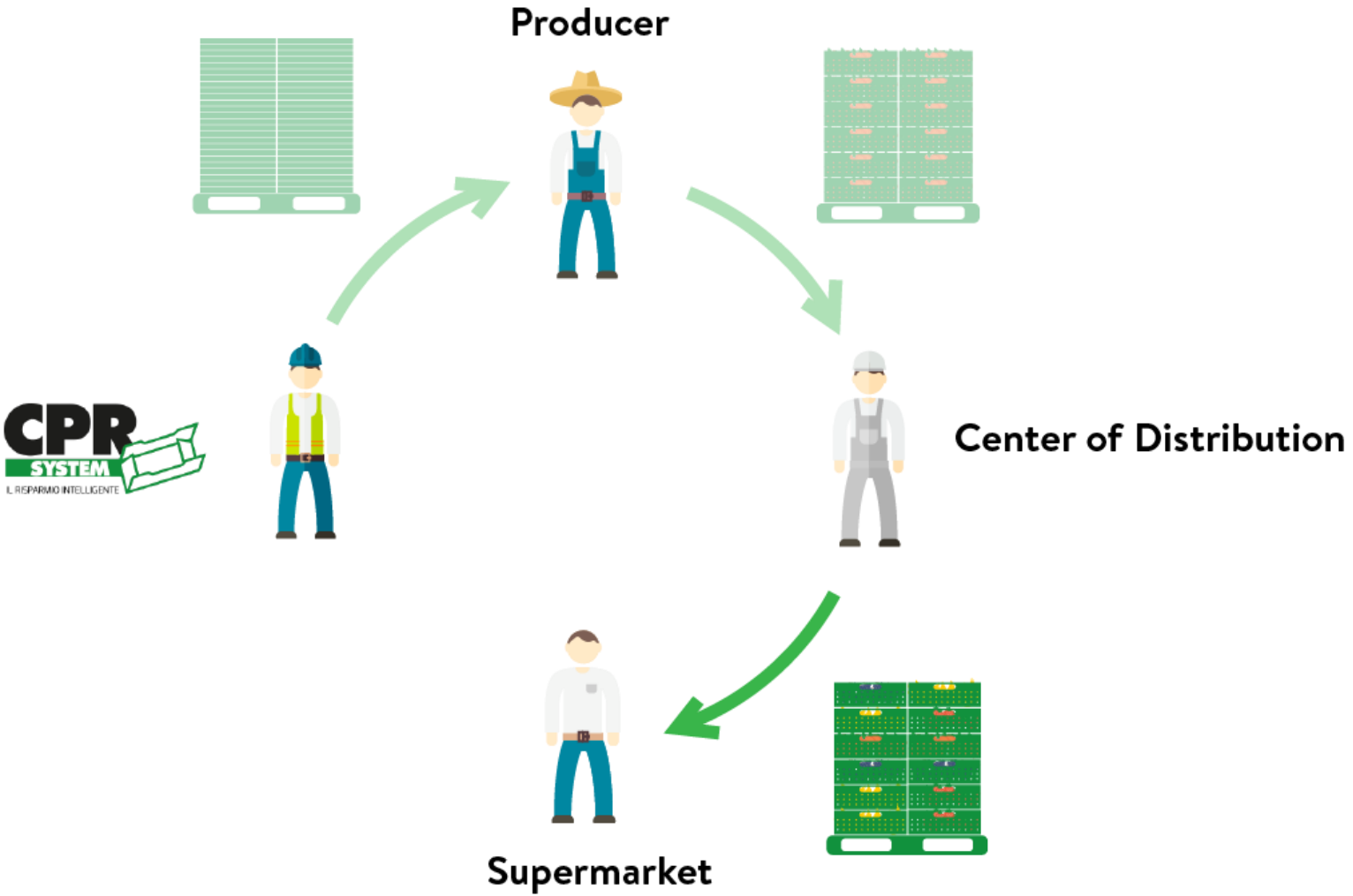


CPR SYSTEM
IL RISPARMIO INTELLIGENTE

Center of Distribution

Supermarket


Producer
CPR
SYSTEM
IL RISPARMIO INTELLIGENTE
Center of Distribution
Supermarket


Producer
Center of Distribution
Supermarket
CPR
SYSTEM
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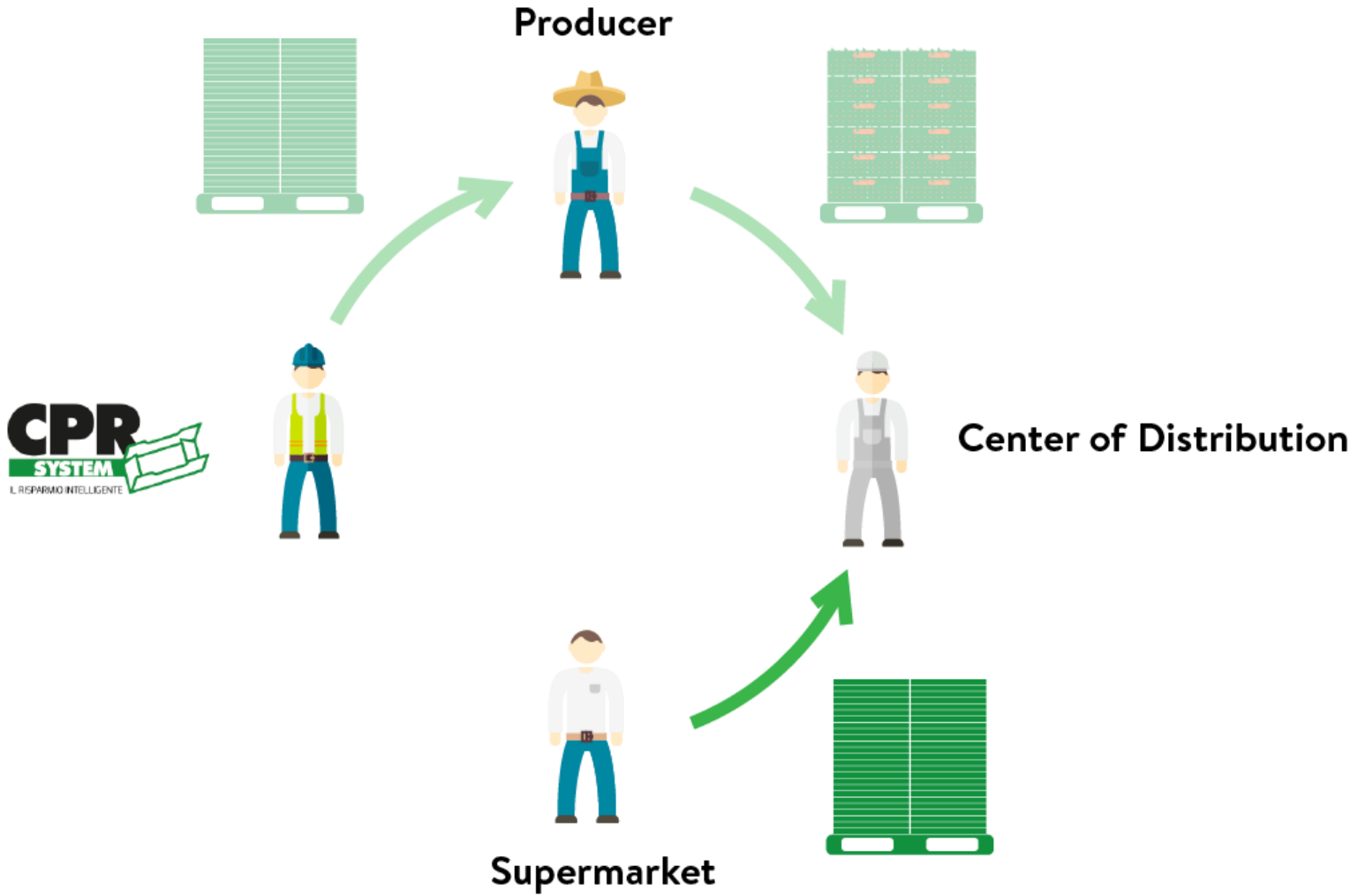
Producer
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Center of Distribution
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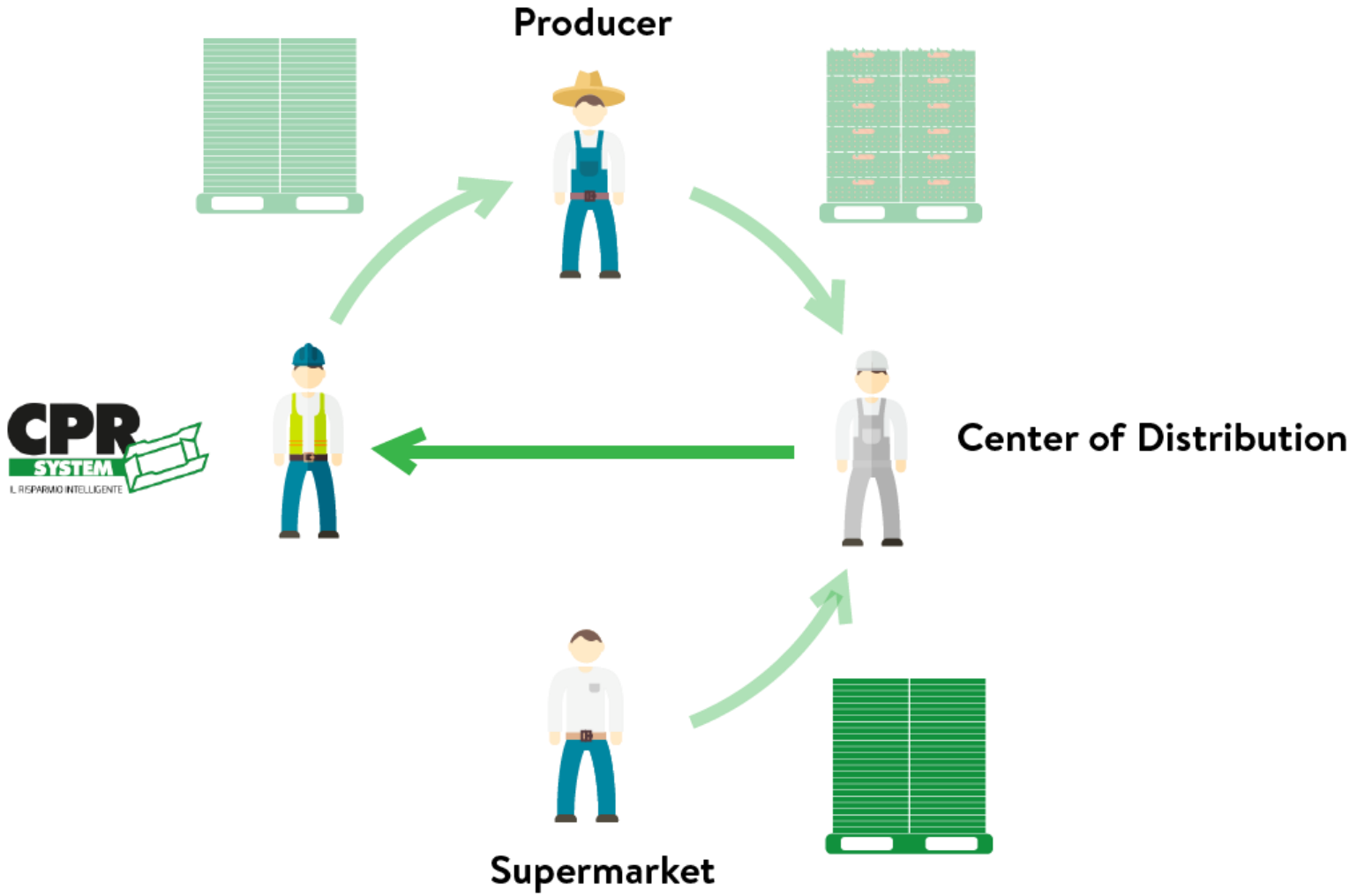
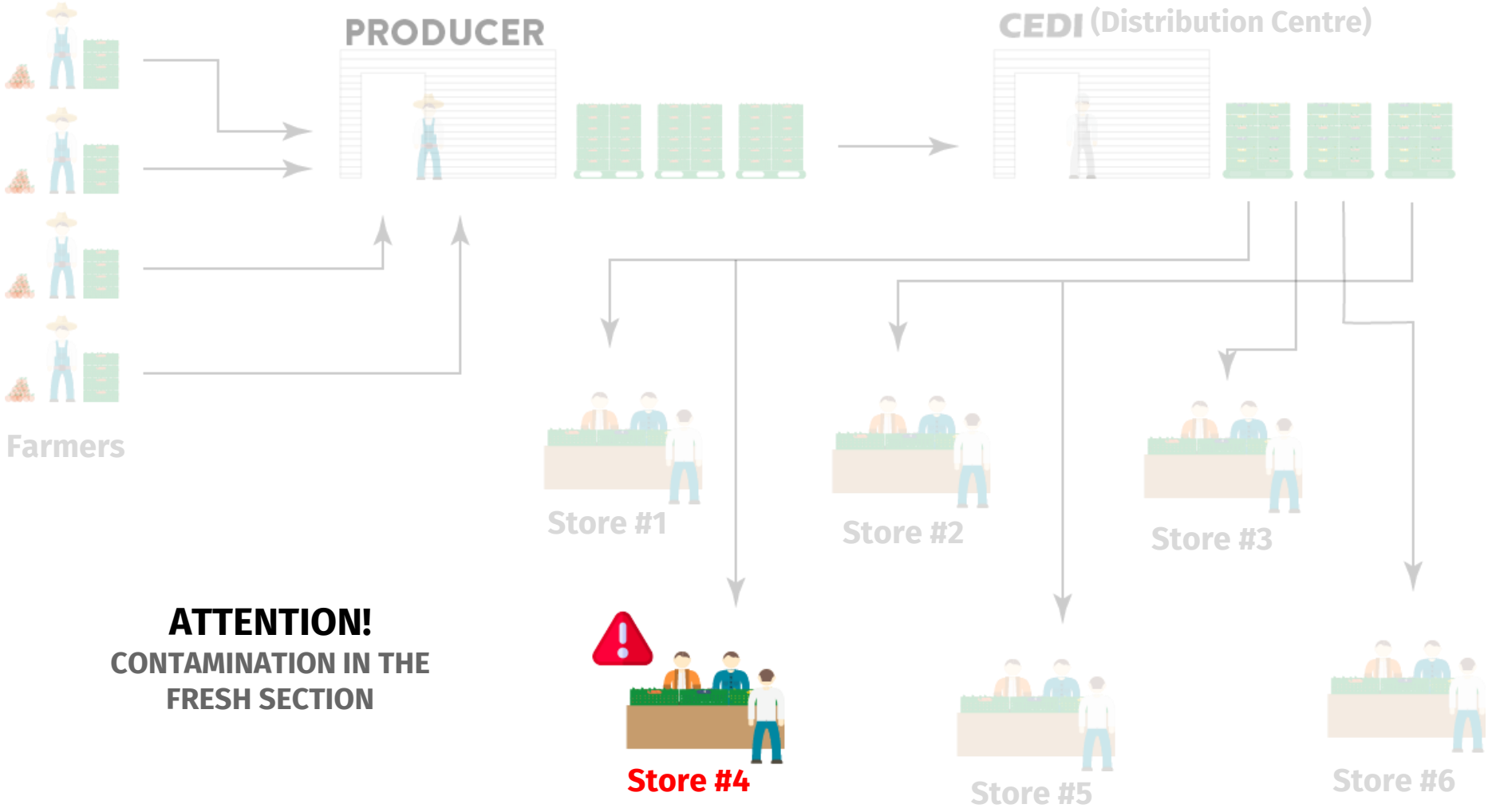
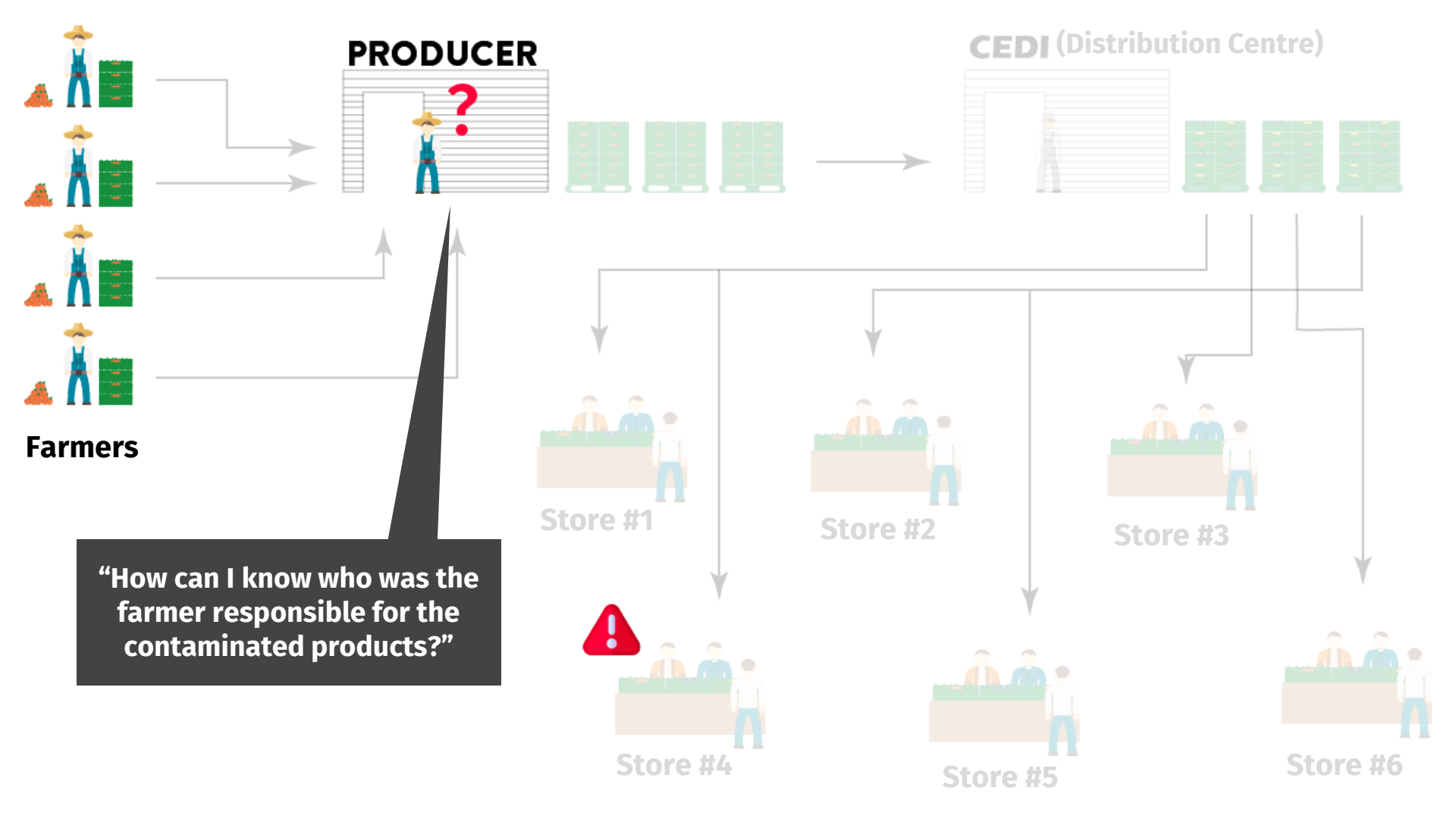

Producer
CPR
SYSTEM
IL RISPARMIO INTELLIGENTE
Center of Distribution
Supermarket

WHICH ARE THE PROBLEMS?



ATTENTION!

CONTAMINATION IN THE FRESH SECTION


PRODUCER
CEDI (Distribution Centre)
Farmers
Store #1
Store #2
Store #3
Store #4
Store #5
Store #6
“How can I know who was the farmer responsible for the contaminated products?”

CONAD

coop

Pam

Pam

CONAD

coop

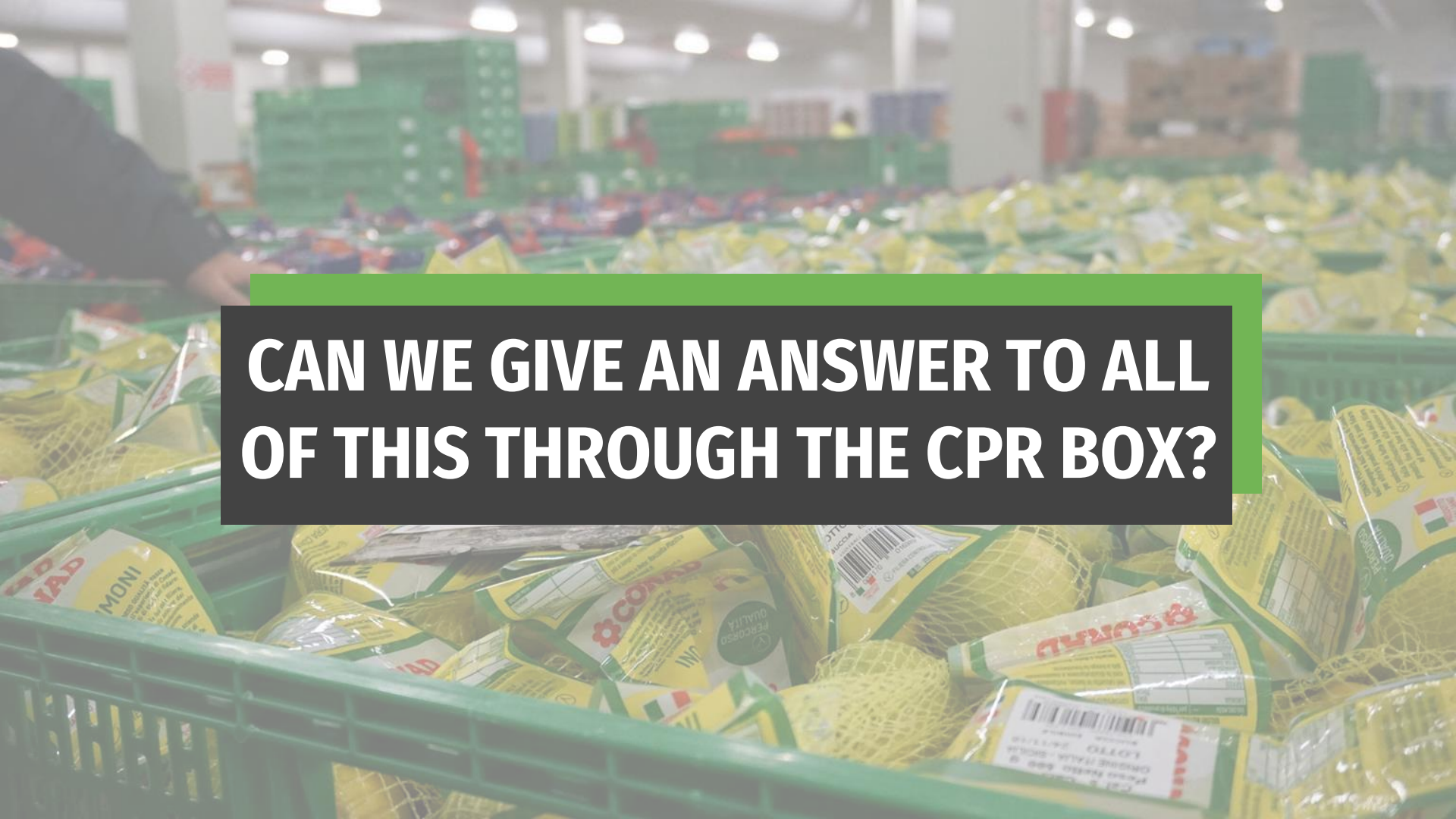
“There are not all the information that we need”

The main

PROBLEM

The boxes do not talk so they cannot tell what happened to them to all the actors

There is not a standard communication system among the actors


CAN WE GIVE AN ANSWER TO ALL OF THIS THROUGH THE CPR BOX?

Our four

DESIGN PRINCIPLES

The **work** of each actor must be **equal or less** than the current one

All the actors should **benefit** from the system

The final customer must have enough information to make **purchases in a conscious way**

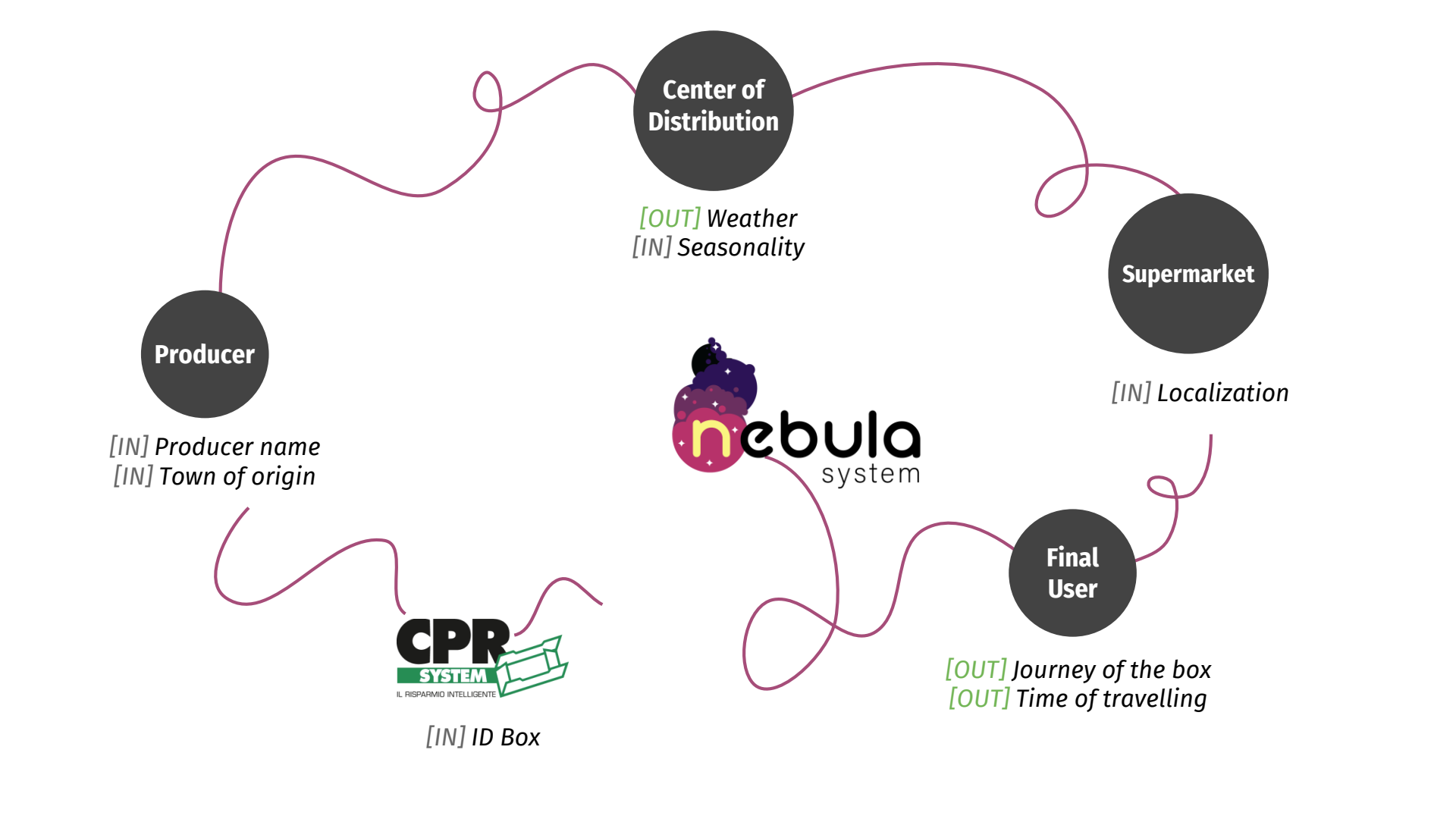
The **company** must have **full control** on what happens in all the steps of the chain

Our system

MAIN GOAL

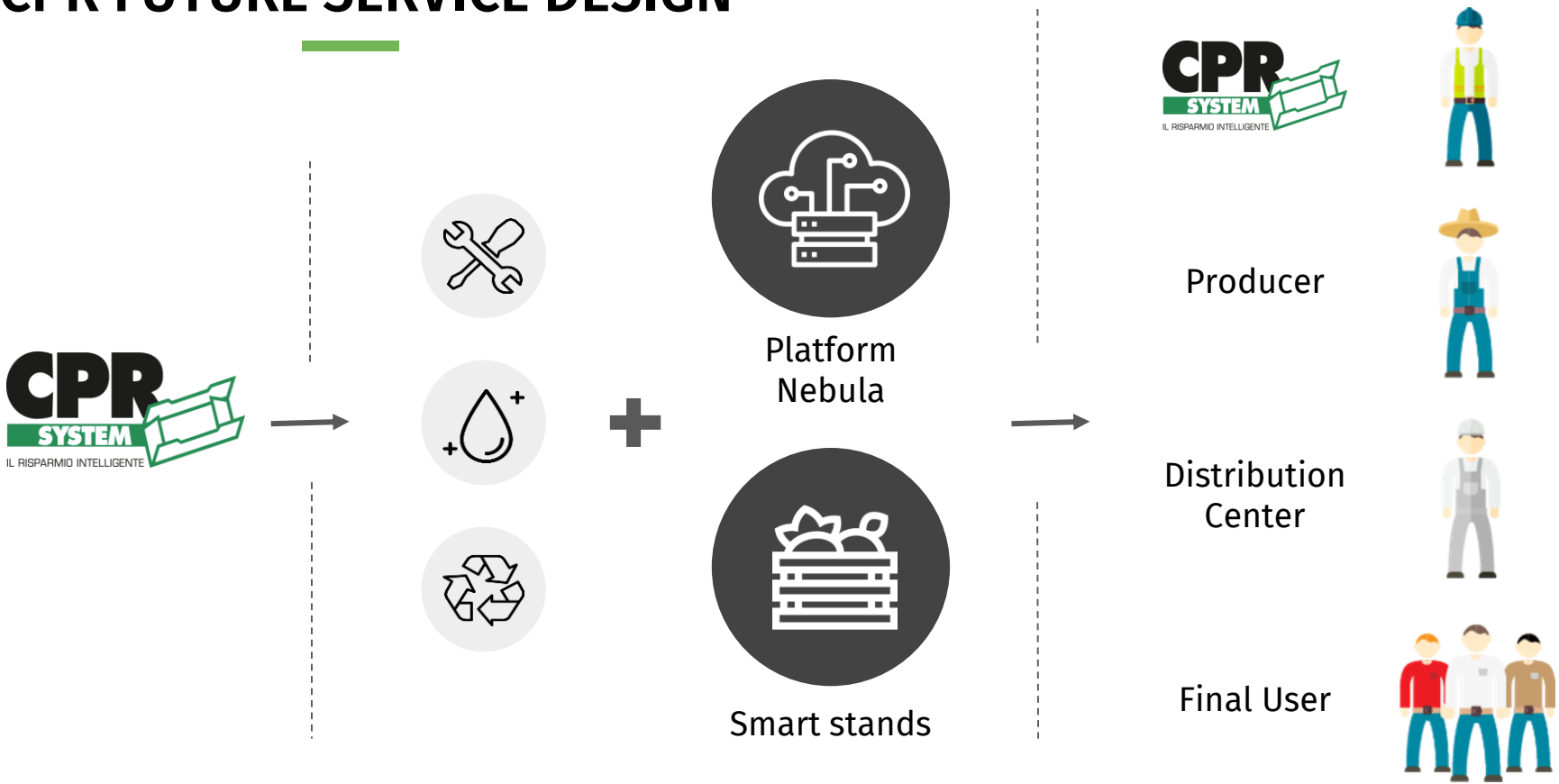
"Creating an **intelligent data collection** and **communication system** based on the CPR boxes"

We created a **shared platform** that connects all the actors among them and a **smart stand** to be connected with one more user, the final customer.


Center of Distribution
[OUT] Weather
[IN] Seasonality
Supermarket
[IN] Localization
Producer
[IN] Producer name
[IN] Town of origin
nebula system
Final User
[OUT] Journey of the box
[OUT] Time of travelling
CPR SYSTEM
IL RISPARMIO INTELLIGENTE
[IN] ID Box

Team Loop

CPR FUTURE SERVICE DESIGN



Nebula

BUSINESS MODEL

PLATFORM NEBULA

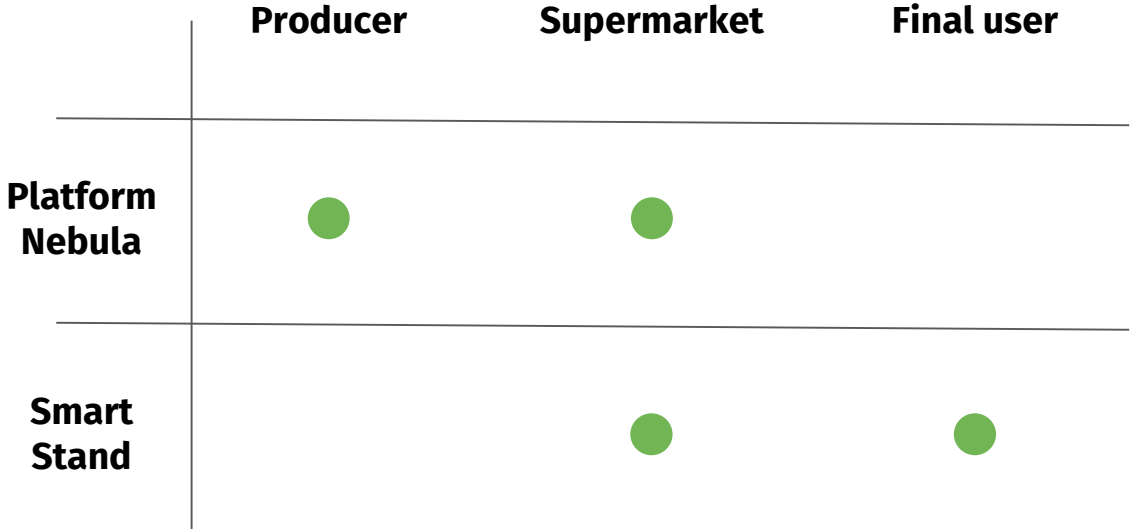
FREEMIUM SERVICE

Tracking and data visualization

SMART STAND

Rent for the use

Data visualization



Analysing the

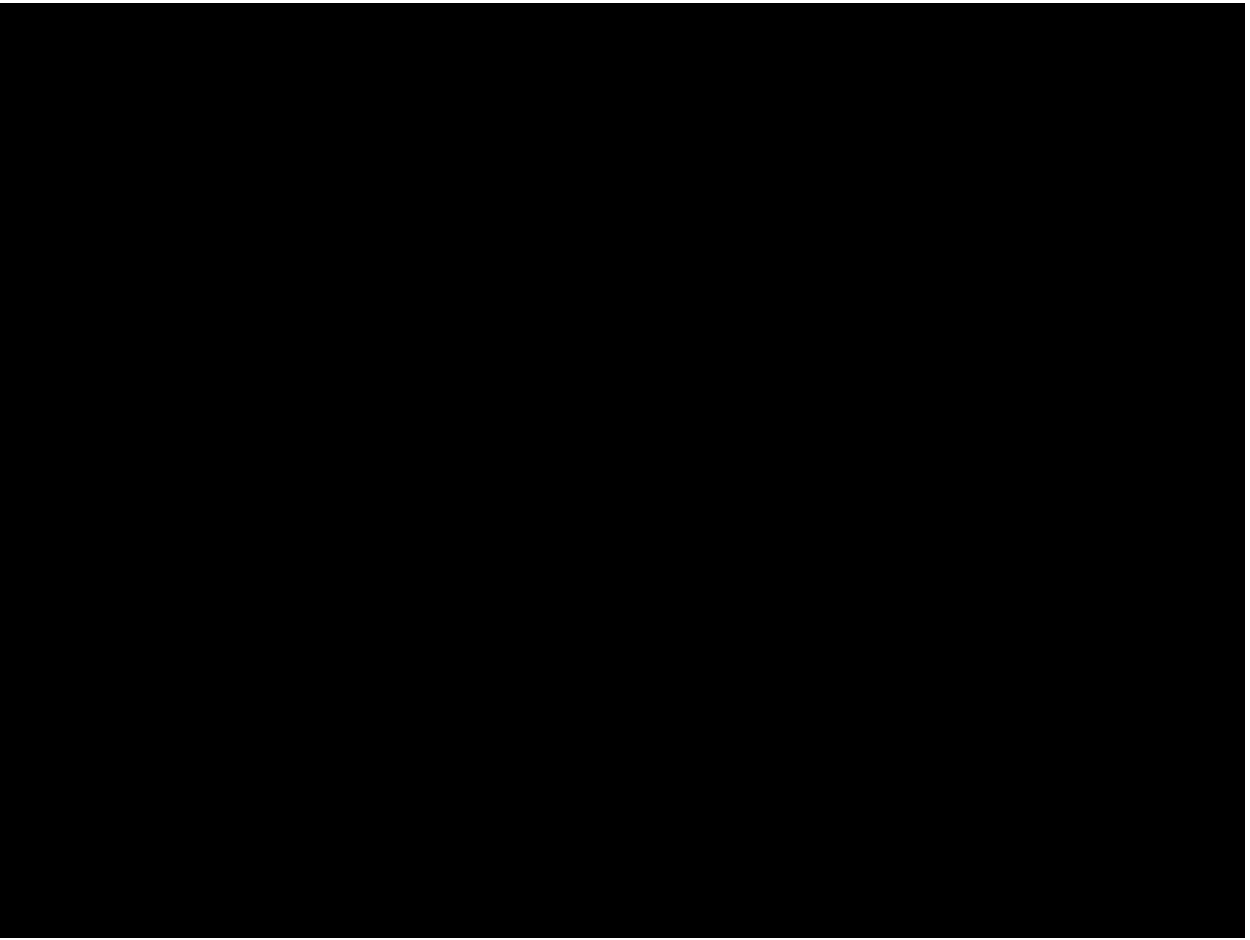
IMPACT OF THE SYSTEM

Less **fruit and vegetables wasted** in case of a damaged products in a batch

A more conscious use of **water and energy** during the washing cycles

Less empty journeys of the truck for the **return streams** of empty boxes

Optimization of the human resources time **automatizing** some **repetitive works**

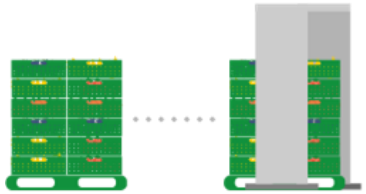


The user interface of

NEBULA SYSTEM

Nebula technology

INPUT DATA AND PROCESSING



RFID GATE

RFID GUN

SMART STAND

C2MON

CERN

Idea^{s}

Nebula technology

OUTPUT DATA AND VISUALIZING

C2MON

Elastic search

API

DATA VISUALIZATION SOFTWARE

PLATFORM

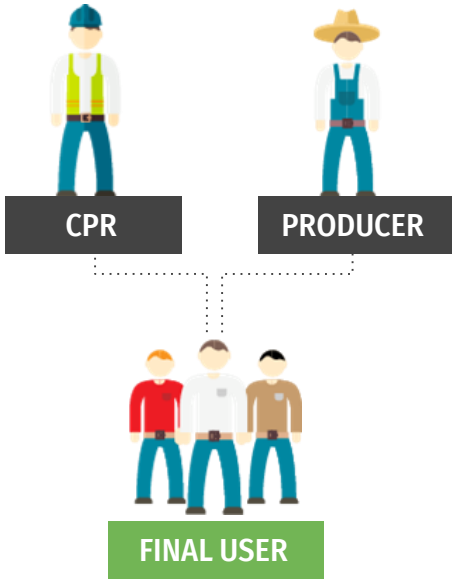
FRUIT STAND

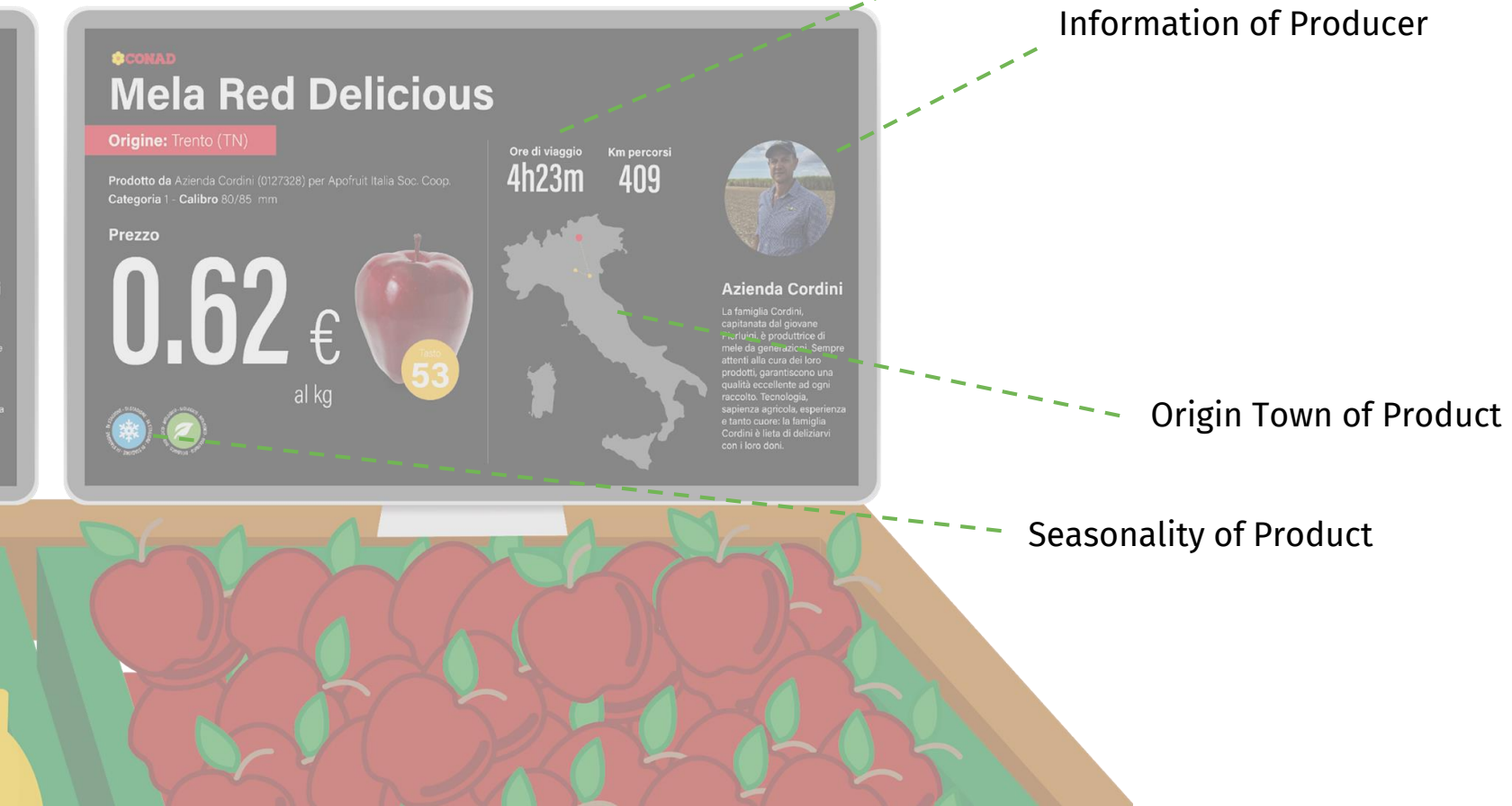
WHY IS OUR SOLUTION VALUABLE FOR YOU, FINAL CUSTOMER?

Data visualization

SMART DISPLAY STAND

New standardized communication and trustable relationship





Time and Km of journey

Information of Producer

Origin Town of Product

Seasonality of Product

NOW YOU KNOW WHAT THE FRUIT HAD TO GO
THROUGH, BEFORE COMING TO YOU!

Thank you for your attention!

L O O P

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MODENA E REGGIO EMILIA

Challenge
Based
Innovation

CERN
Ideas