

# Growing data...

the importance of capturing, sharing,  
validating and monetizing data  
throughout Food & Agri ecosystems

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# Global challenges

Feed 9.6 billion people in 2050

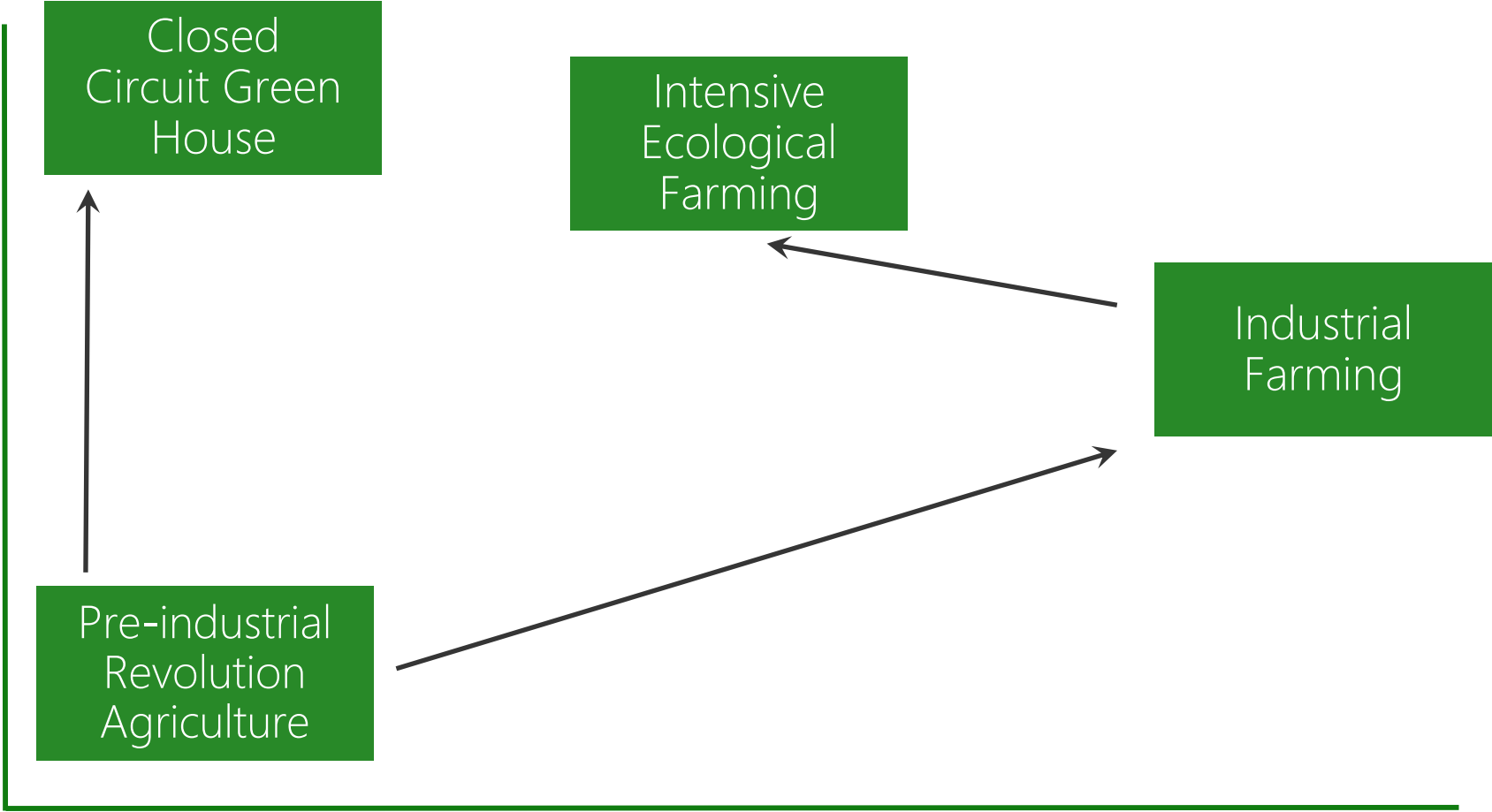
Preserving scarce natural resources while increasing production

Global shifts in diet and taste



# We need to feed the whole world

Science



Local

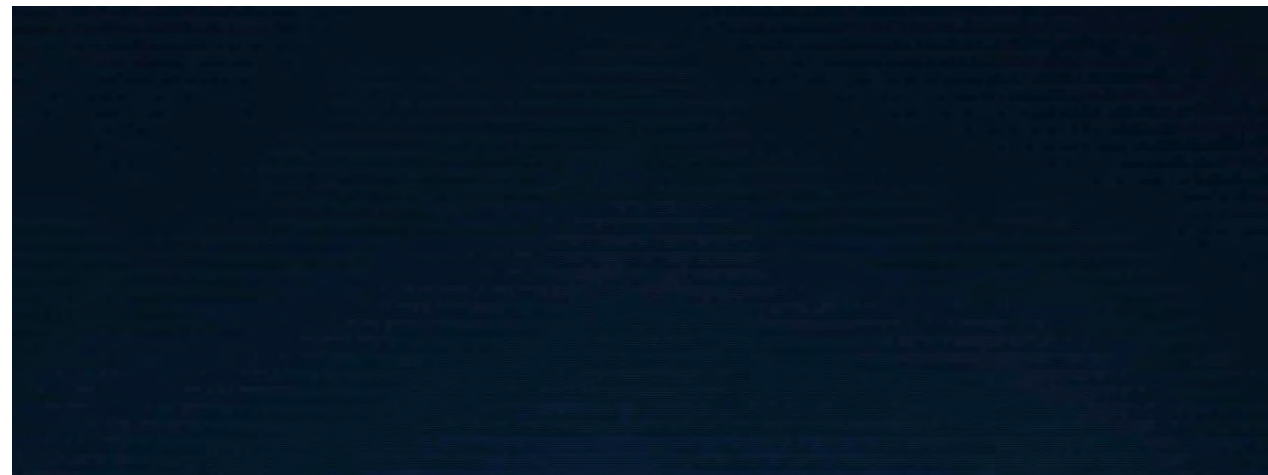
Regional

Global

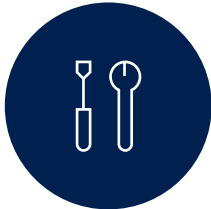
Scale

# Fourth industrial revolution

Digital Transformation



# DIGITAL TRANSFORMATION



Empower  
employees



Engage  
customers

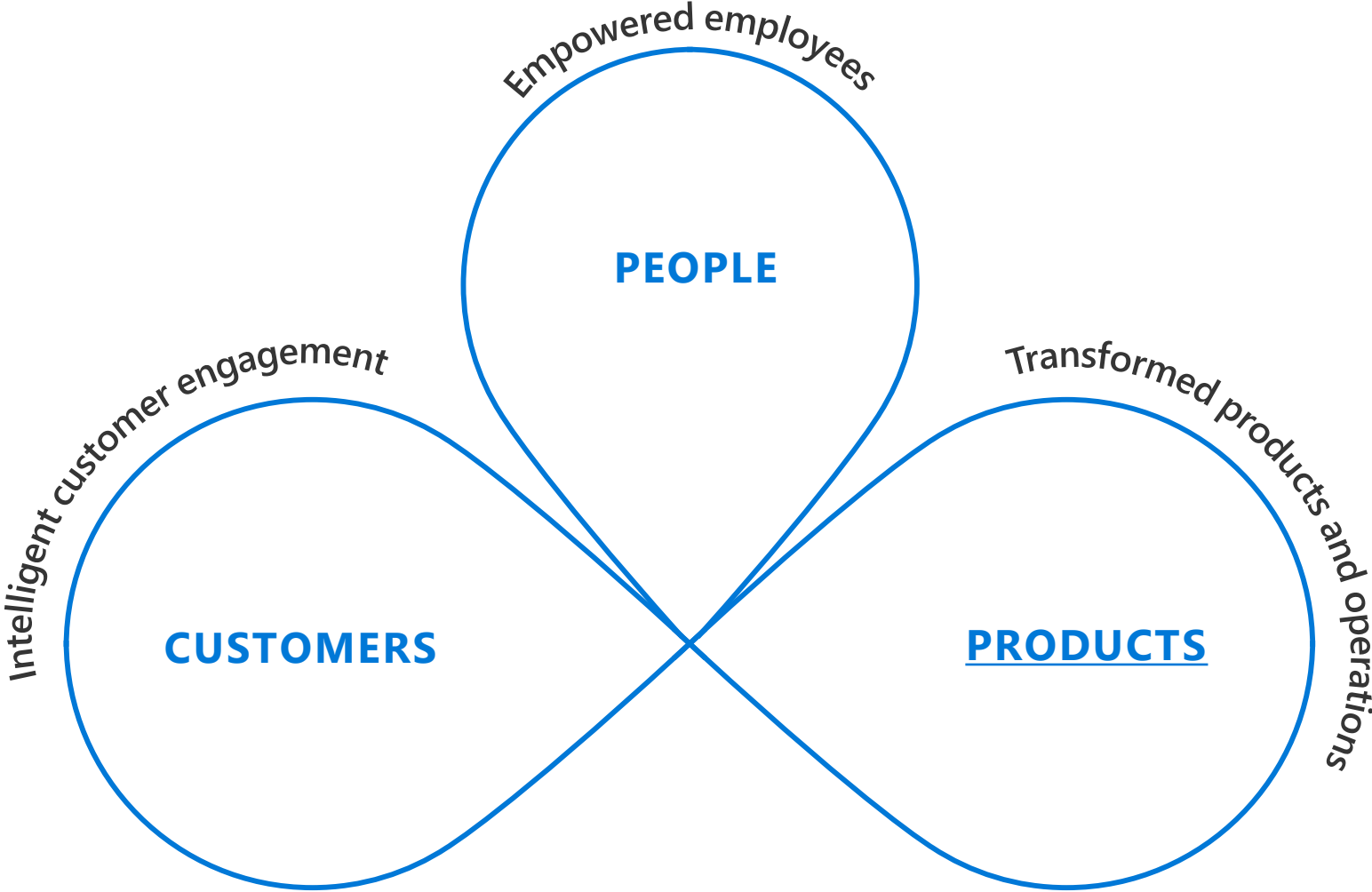


Optimize  
operations



Transform  
products

# DIGITAL FEEDBACK LOOP





## SOME TRENDS IN “DIGITAL”

By 2018, six billion “things” will have the ability to request support – *Gartner*

25 billion connected “things” will be in use by the end of 2018 – *Gartner*

500 billion connected ‘things’ will be in use 5 years from now – *Frost & Sullivan*

By 2025, the Internet of Things could generate more than \$11 trillion a year in economic value – *McKinsey*



The Age of  
**DATA**

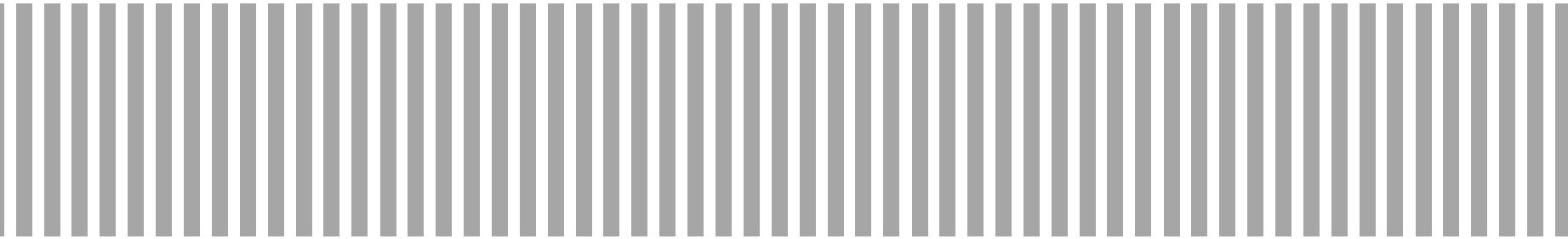


# How Did We Get Here?

“Datafication”

# Acquiring & Storing 1 TB Of Data

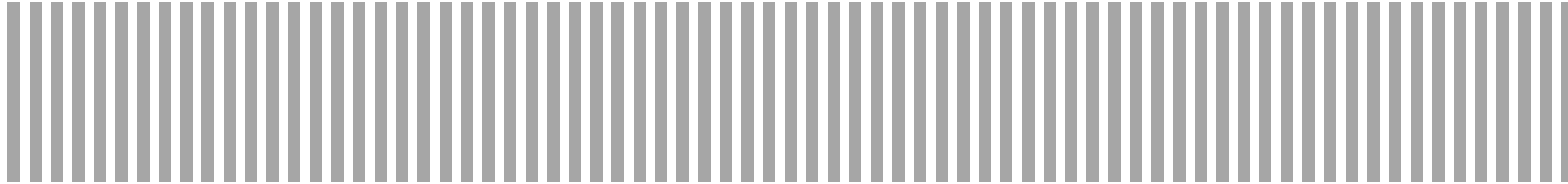
1982



**\$1.5B**

# Acquiring & Storing 1 TB Of Data

1982 – \$ 1.5 B



2018



\$5.00



“This data *currently* has not enough value to bother deleting it.”

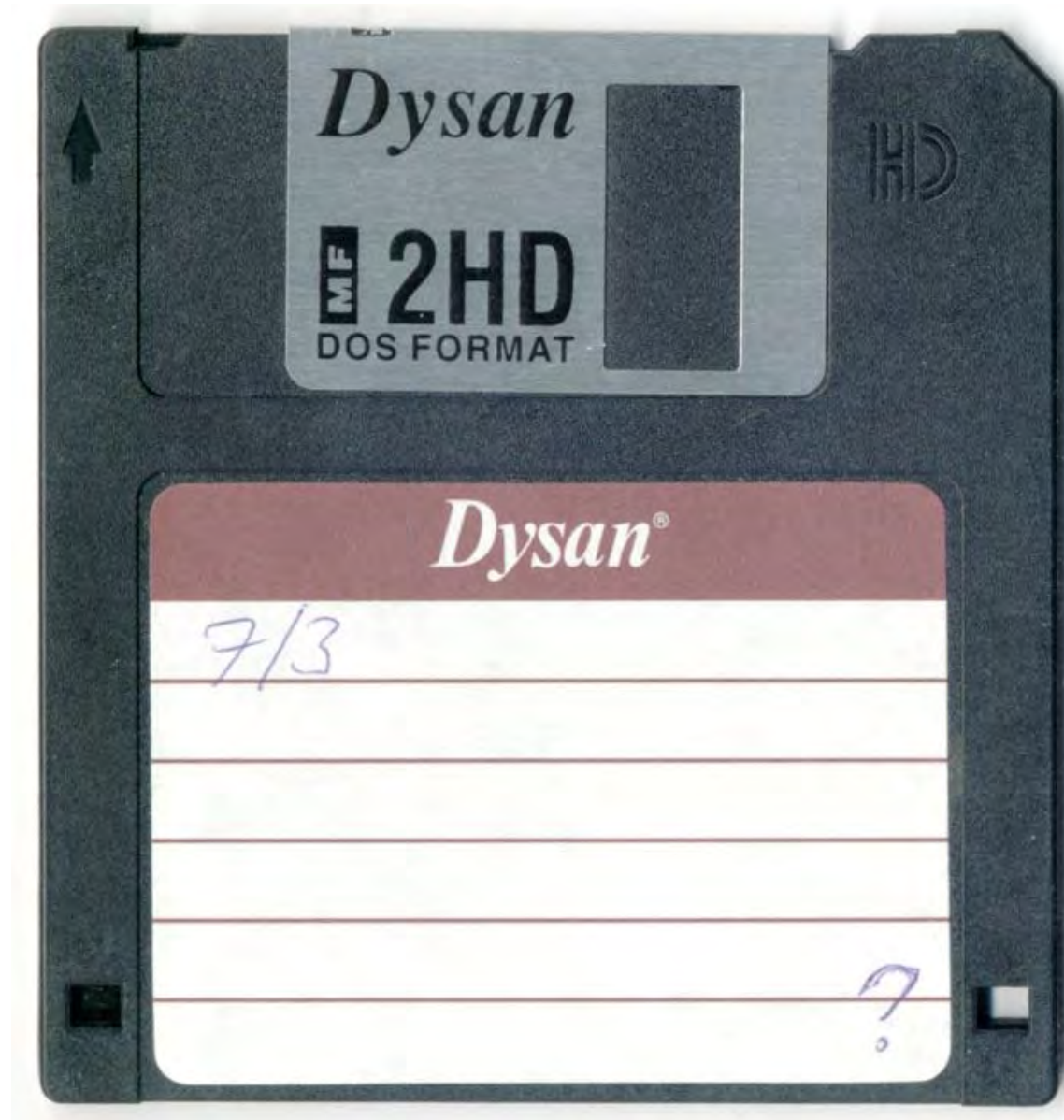
(emphasis mine)

# How Did We Get Here?

“Datafication”

Cheap storage

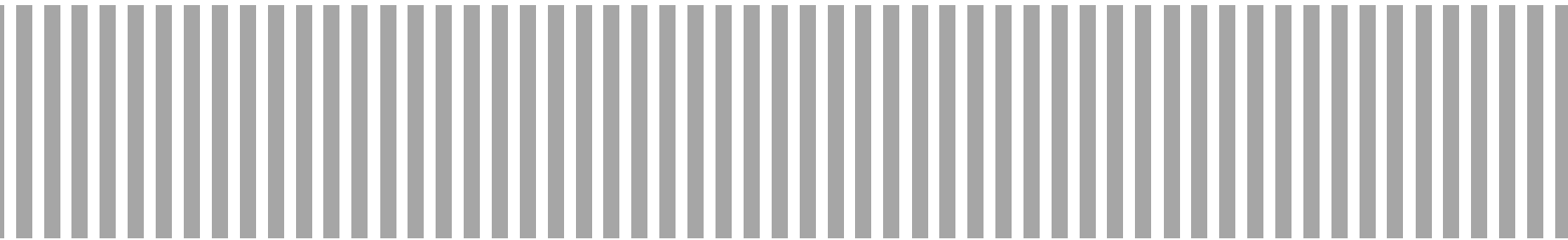
# Information Production





# Information Production

2010



1.2 ZB

*Source: IDC 2010 – Digital Universe Study*

1 ZB = 1 ZettaByte =  $10^{21}$  bytes = 1.000.000.000.000.000.000.000 bytes

# Information Production

2010 – 1.2 ZB

2020

35 ZB

*Source: IDC 2010 – Digital Universe Study*

1 ZB = 1 ZettaByte =  $10^{21}$  bytes = 1.000.000.000.000.000.000.000 bytes

Drowning in a *lake of data*, breathless for insight  
(pun intended)



Big Data enables creativity



# Fruitmasters



# Data is the new currency

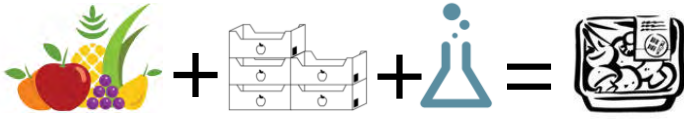
You can use data more than once.  
(compare to resources)

Data does not break or require maintenance.  
(like a machine)

Data does not get tired or suffer from burn-outs.  
(like humans)

**OK...** so what now?

# Information

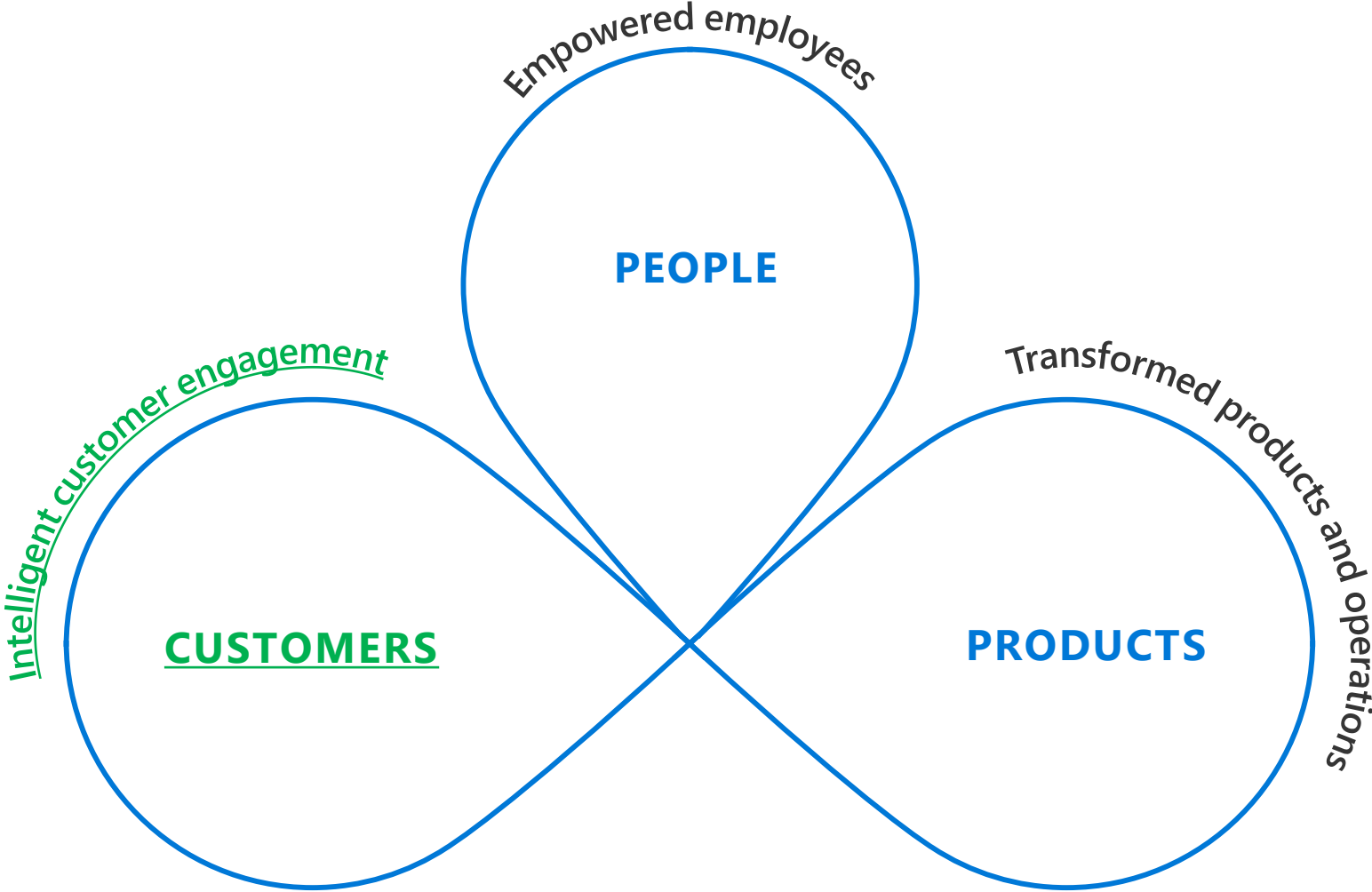


is our  
product



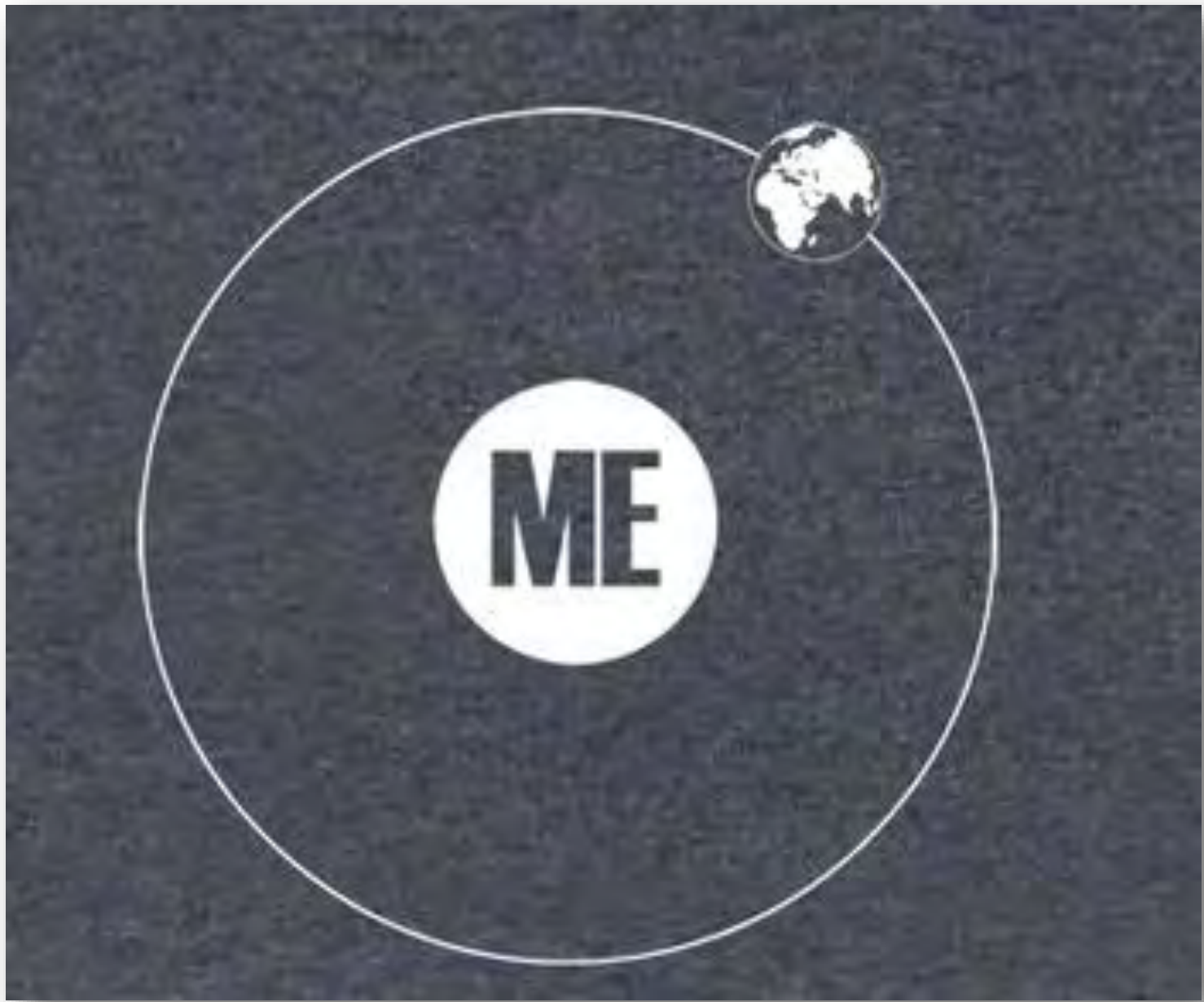


# DIGITAL FEEDBACK LOOP



CUSTOMER 2.0





A black and white photograph of a hand holding a key. The hand is positioned palm-up, with the index finger pointing towards the key. The key is held between the thumb and index finger. The background is dark and out of focus. Overlaid on the image is the text "THE CUSTOMER HOLDS THE KEY" in a white, sans-serif font, centered horizontally and vertically.

THE CUSTOMER  
HOLDS THE KEY

# EXPECTATIONS

KNOW ME

MAKE IT MATTER

ONE CONVERSATION

UNDERSTAND

MY JOURNEY

BE RELEVANT

FOCUS ON VALUE

DELIVER

WOW



FOR EVERY  
CUSTOMER



ANY PLACE

ANY CHANNEL

ANY TIME







Veelgestelde vragen

Klantenservice

NAAR VERSEOOGST.

# Concepts



**Welke Maaltijdbox Kies Jij?**

de Krat.nl | MATHIJS MAALTIJDBOX | Smaakbox

Maaltijdbox.org | Maaltijdboxen vergelijken en bestellen met korting

Hoeksche



**Chips**  
Op de boerderij gebakken



Dagelijks vers op  
de boerderij gebakken

BEKIJK ALLE SMAKEN

Heerlijke chips, zo van 't land!

Hoeksche



**Chips**  
Op de boerderij gebakken



# Disruption and innovation at every stage of the F&A Chain



# Big appetite for high tech in agriculture: Blue River

Assists farmers in making data-based operational decisions to optimize yield and boost revenue while minimizing expenses, the chances of crop failure, and environmental impact.



# Find the needle in the haystack with LumoVision

A close-up photograph of a person's hand holding a large quantity of yellow corn kernels. The kernels are piled in the palm and are the central focus of the image. The background is softly blurred, showing more of the hand and the texture of the corn. The overall lighting is warm and natural.

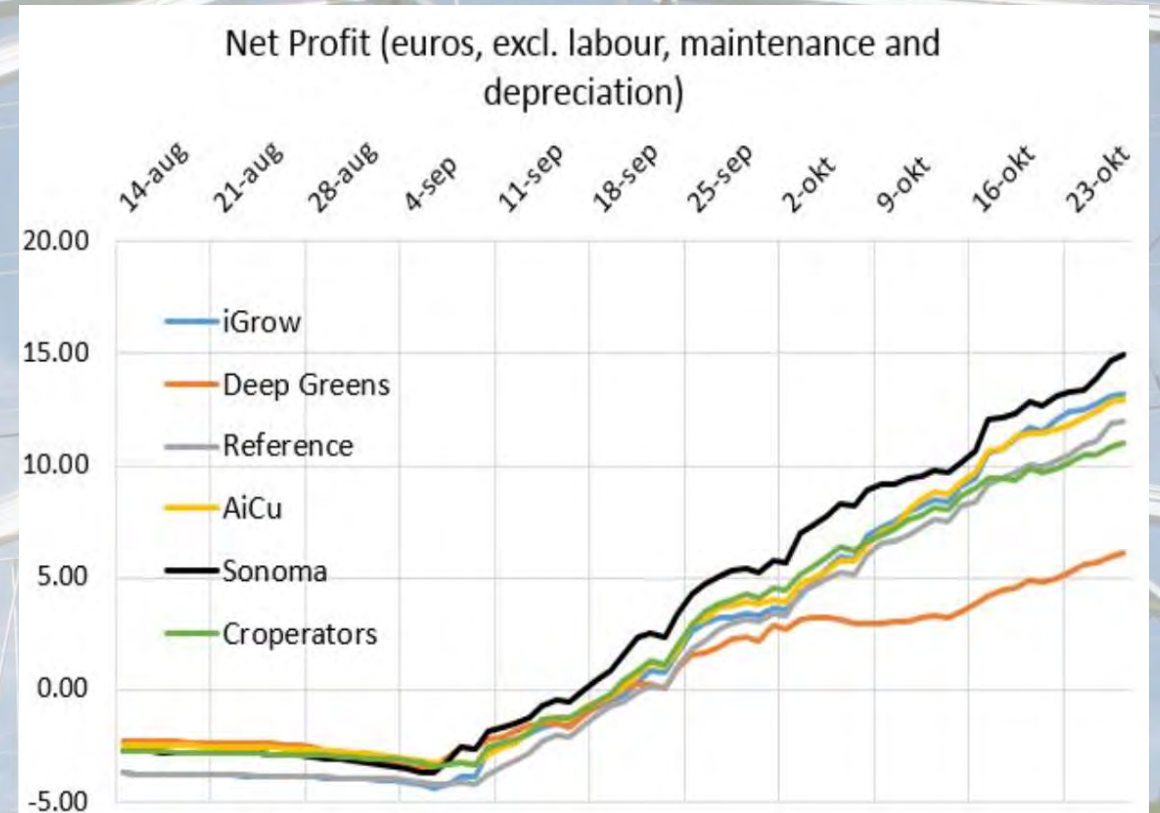
Data-driven  
grain sorting  
technology to  
ensure traceability  
and quality of the  
product.

# Autonomous Greenhouse Challenge

## BUILD THE GREENHOUSE OF THE FUTURE

Follow our international challenge to improve greenhouses through AI and sensors

Most profitable outcome will win



# Retail experience – how to serve the consumer 2.0

The Supermarket of the Future is an ultramodern sustainable take on the traditional local food market, with the benefits of high-tech equipment such as cloud technology, IoT and mobile technology



Visitors in Store

0

Total



COOP: <https://youtu.be/CTArXgMtu4Q>





LIMONI COSTA D'ANALI				
VALORI NUTRIZIONALI PER PORZIONE A.R. / NUTRITIONAL VALUES - R.A.				
ENERGIA	ZUCCHERI	GRASSI	AC. GRASSI SATURI	SALE
ENERGIA	ZUCCHERI	GRASSI	AC. GRASSI SATURI	SALE
10.00 kcal	3.50 g	0.00 g	0.00 g	0.00 g
42.00 kJ	9.00 g	0.00 g	0.00 g	0.00 g
7%	6%	0%	0%	0%

IMPRonta AMBIENTALE / CARBON FOOTPRINT: 0.5 g/100g CO<sub>2</sub>

Sustainability and contribution to global challenges will be the new normal in the next decade

Increasing clean water



Using renewable energy



Being carbon neutral



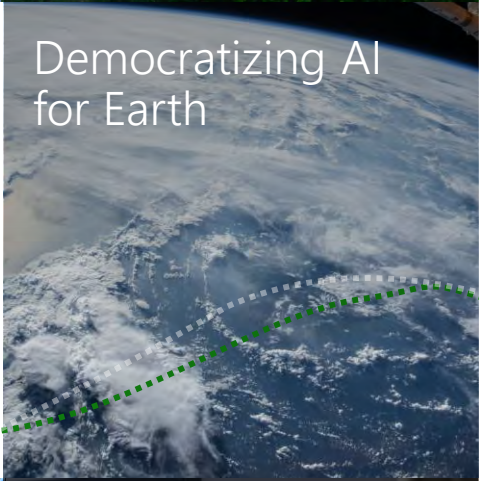
Creating a circular economy



Microsoft policies and business practices reflect a commitment to making our planet a better place



Democratizing AI for Earth



Increasing crop yields



Disclosing raw materials

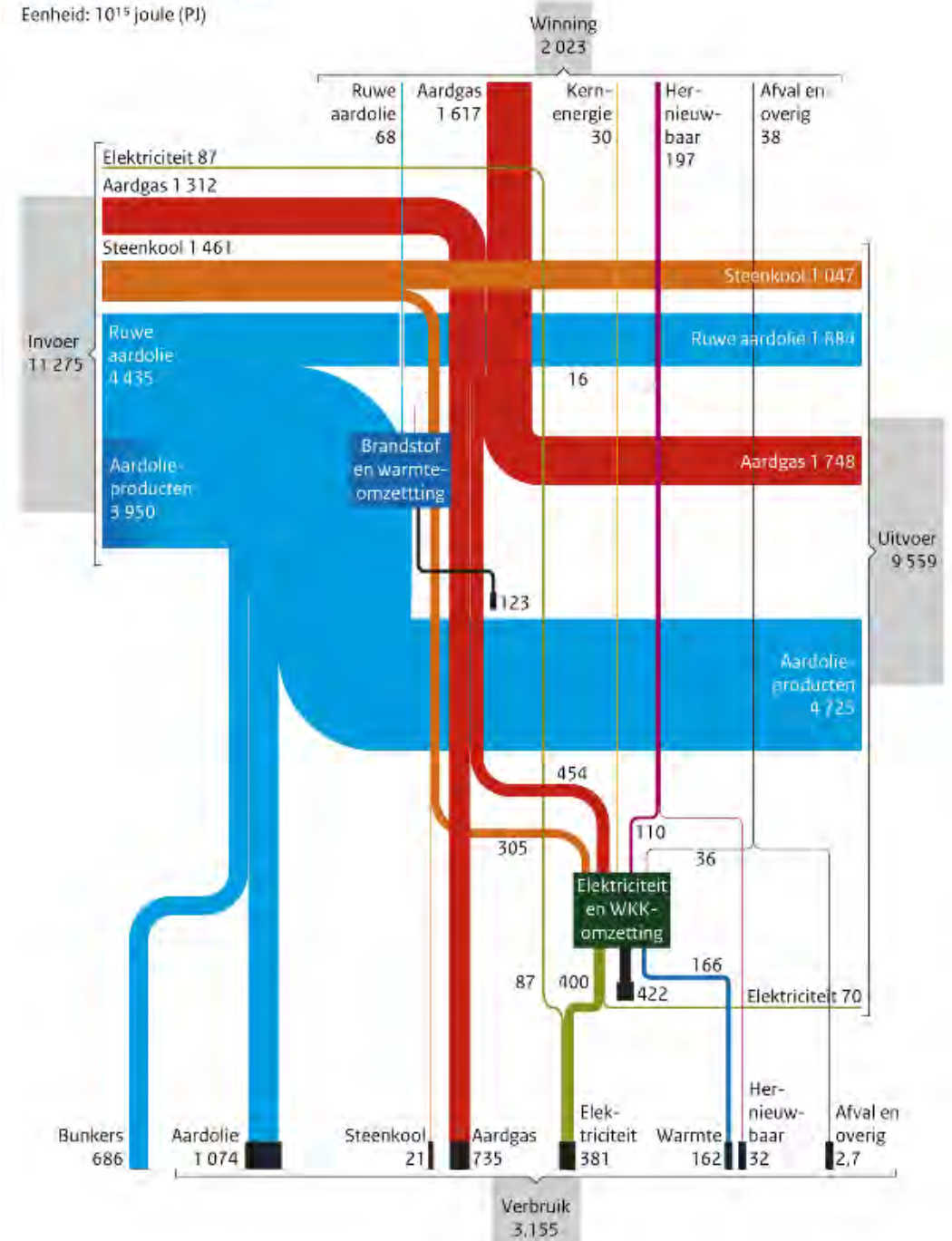


Serving on the GeSI board



### Energiestromen, 2016\*\*

Eenheid: 10<sup>15</sup> joule (PJ)



# Thanks

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