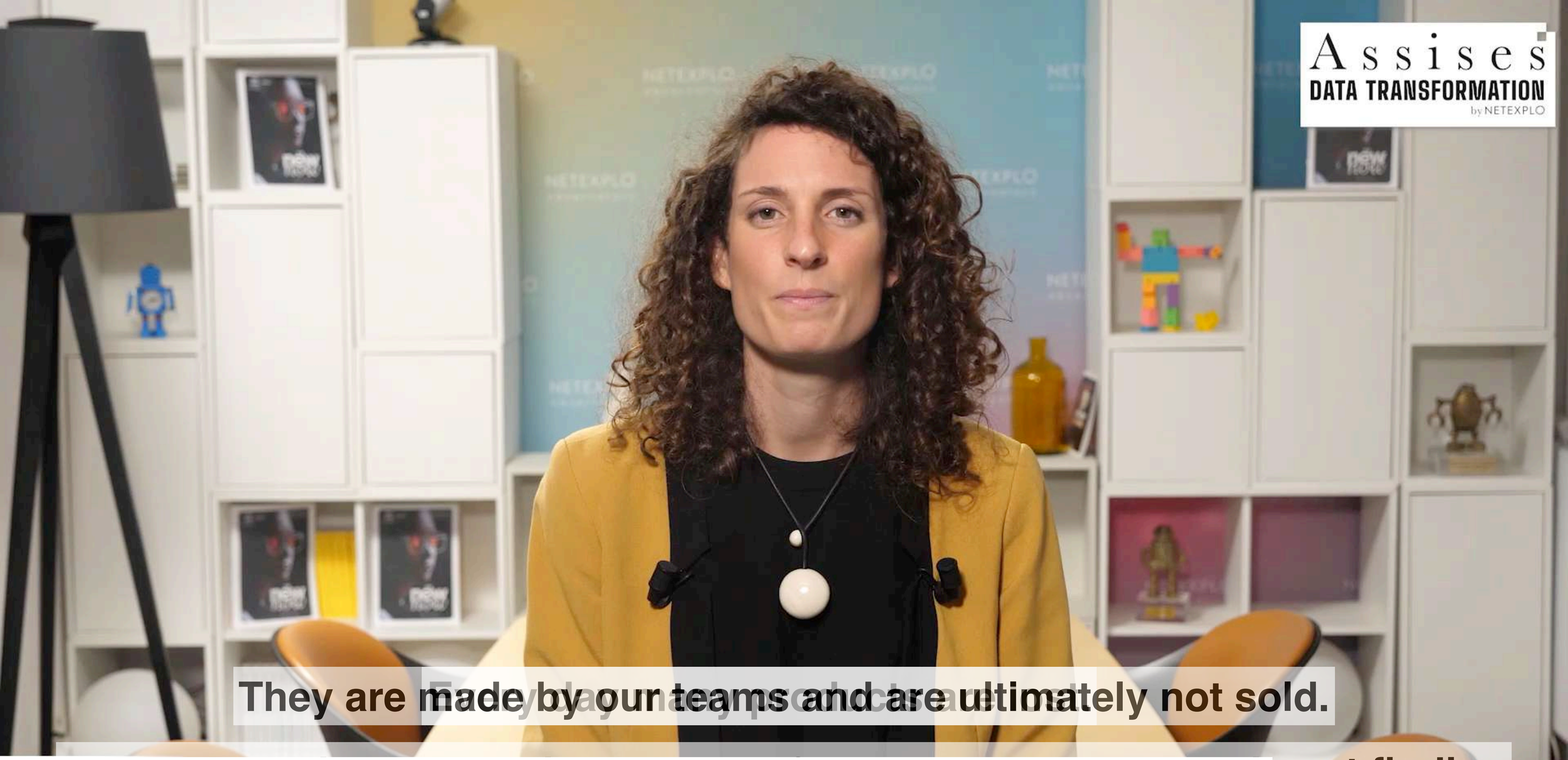
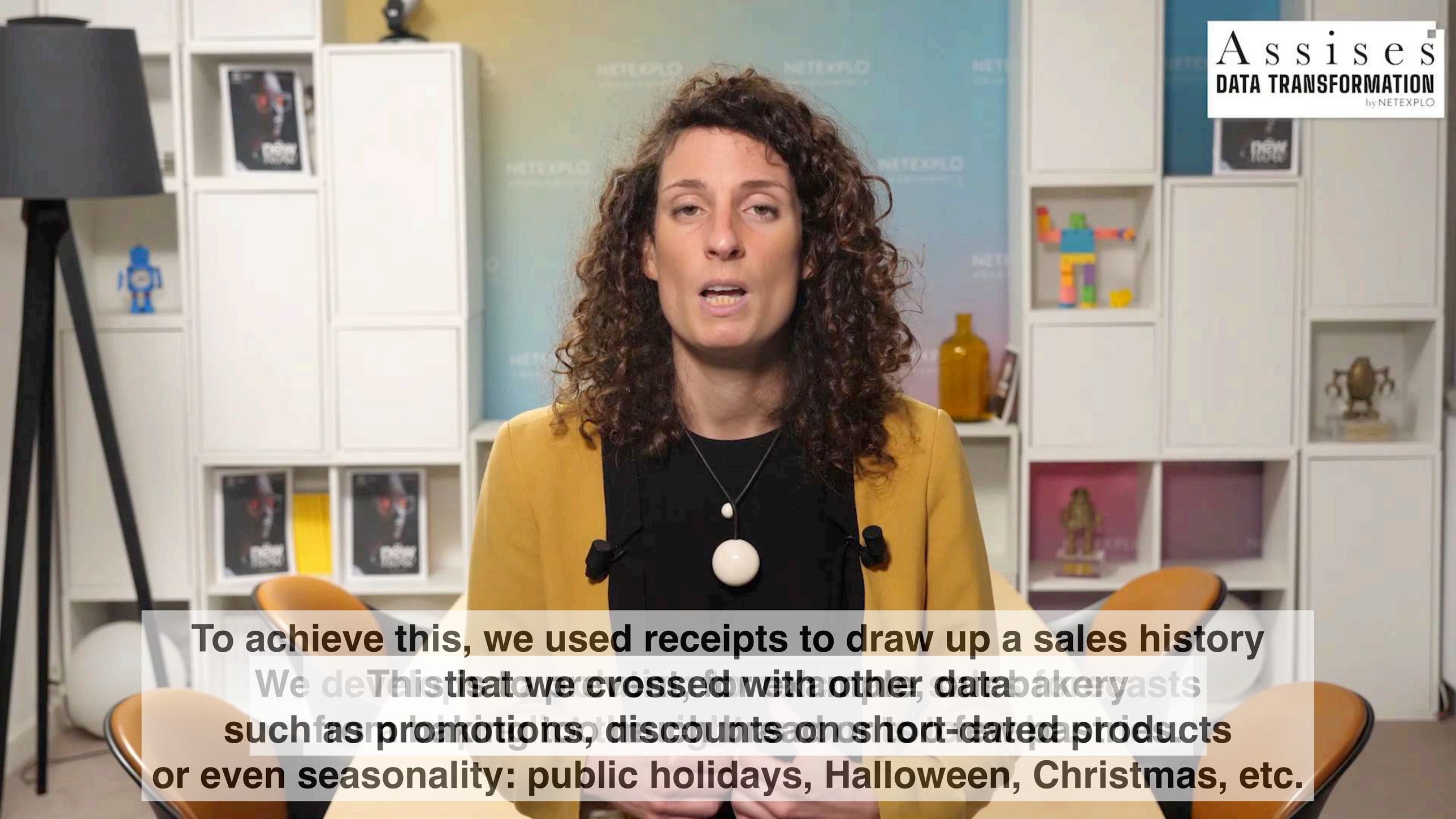
INTERVIEW OF CHARLOTTE RECORBET
DIRECTOR, BAKERY MARKET

WHAT WAS THE CONTEXT OF YOUR DATA PROJECT?

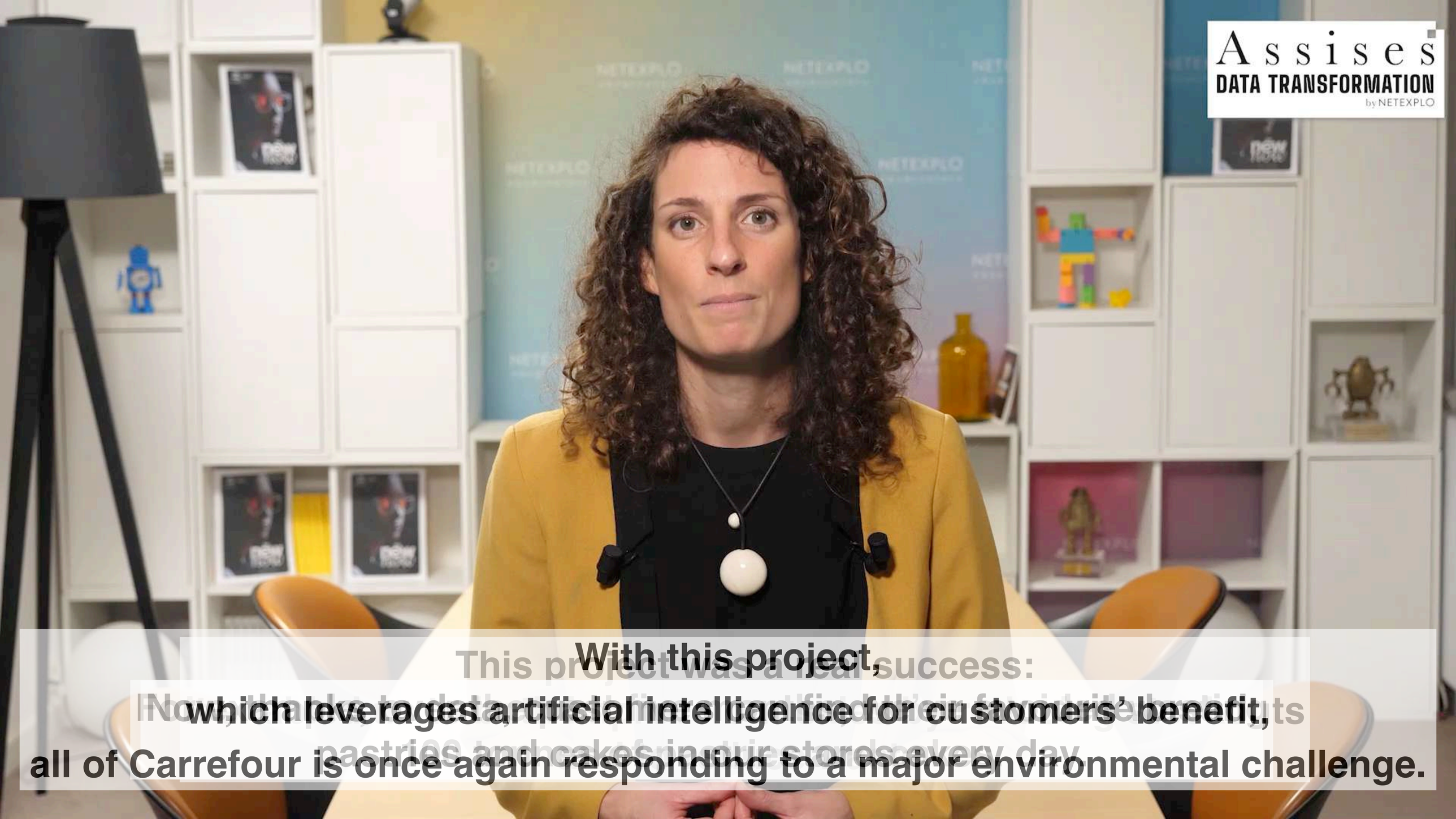


Charlotte Recorbet, Director, Bakery Market

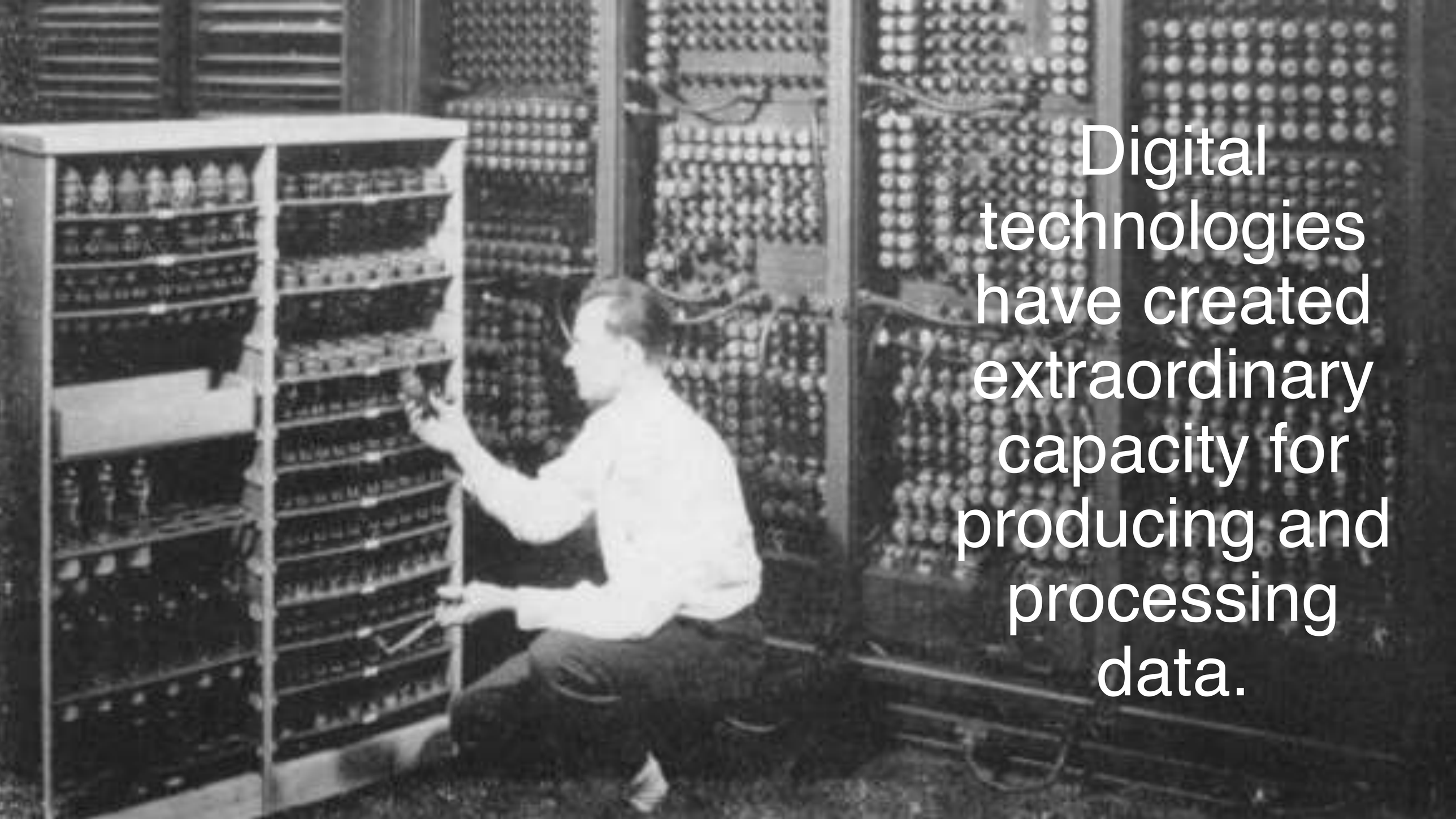
WHAT IS YOUR PROJECT AIM?


Assises
DATA TRANSFORMATION
by NETEXPLO
To achieve this, we used receipts to draw up a sales history
that we crossed with other data
such as promotions, discounts on short-dated products
or even seasonality: public holidays, Halloween, Christmas, etc.

WAS YOUR PROJECT SUCCESSFUL?


Assises
DATA TRANSFORMATION
by NETEXPLO
With this project,
which leverages artificial intelligence for customers' benefit,
all of Carrefour is once again responding to a major environmental challenge.

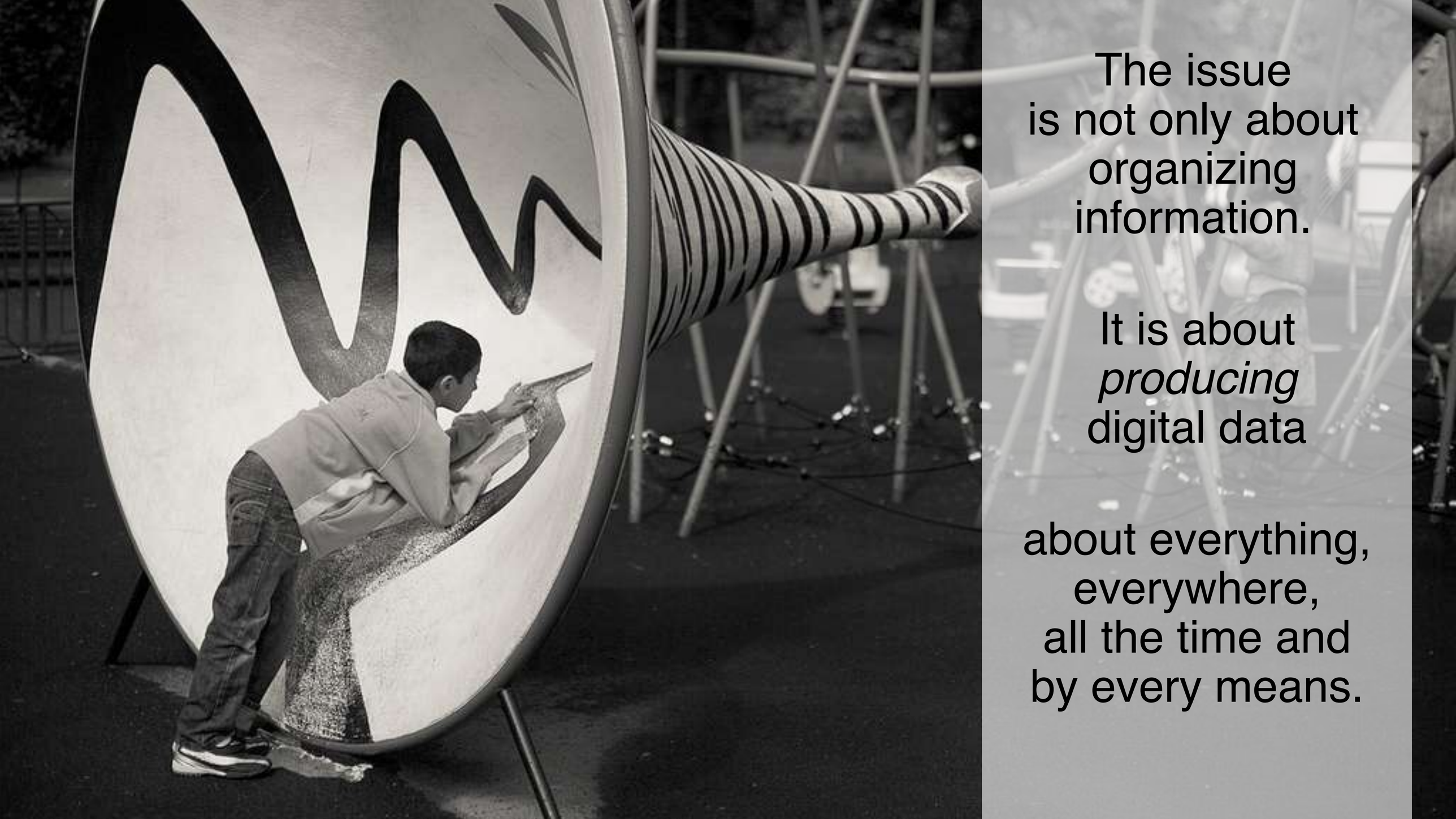
PERSPECTIVE



Digital technologies have created extraordinary capacity for producing and processing data.

About Our products Our commitments Our stories

Our mission is to organize the world's information and make it universally accessible and useful.



The issue
is not only about
organizing
information.

It is about
producing
digital data

about everything,
everywhere,
all the time and
by every means.

Information

Health

Human knowledge

Brain activity

Logistics

Arts

Turning everything into data…

Manufacturing

Geographical environment

Human body

Online behavior

Physical surroundings

Social relations

Distribution…

Online production

Automatic recognition

Online navigation

Infrastructure & productivity connected objects

…by any means

Mobiles

Wearable connected devices

Mobile connected devices

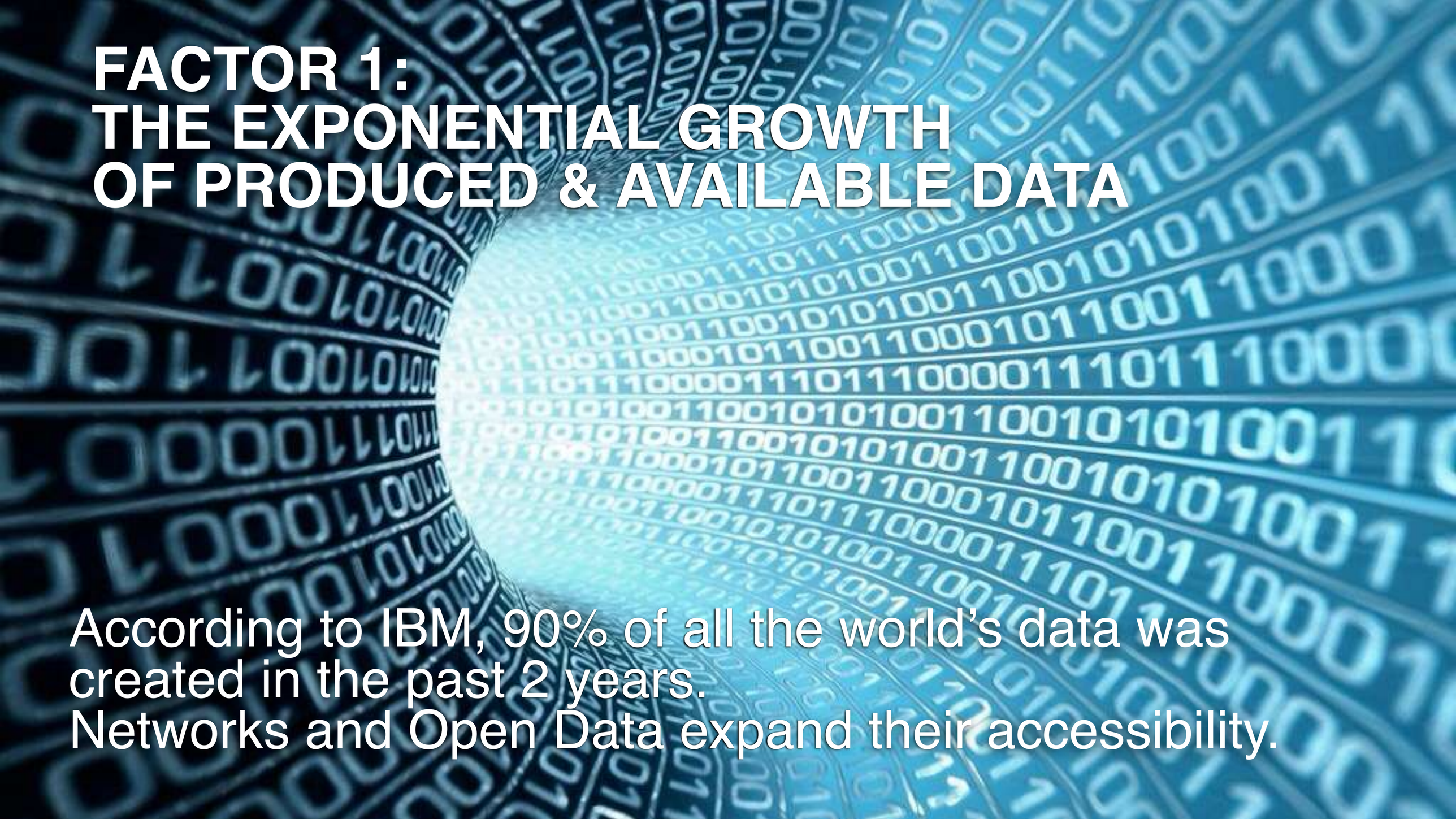
Home connected objects

Turning everything into data,
so to transform everything with data.

Tout transformer en données
pour tout transformer par les données

There is no longer
a “digital sector” on one hand
and
“traditional sectors” on the other.

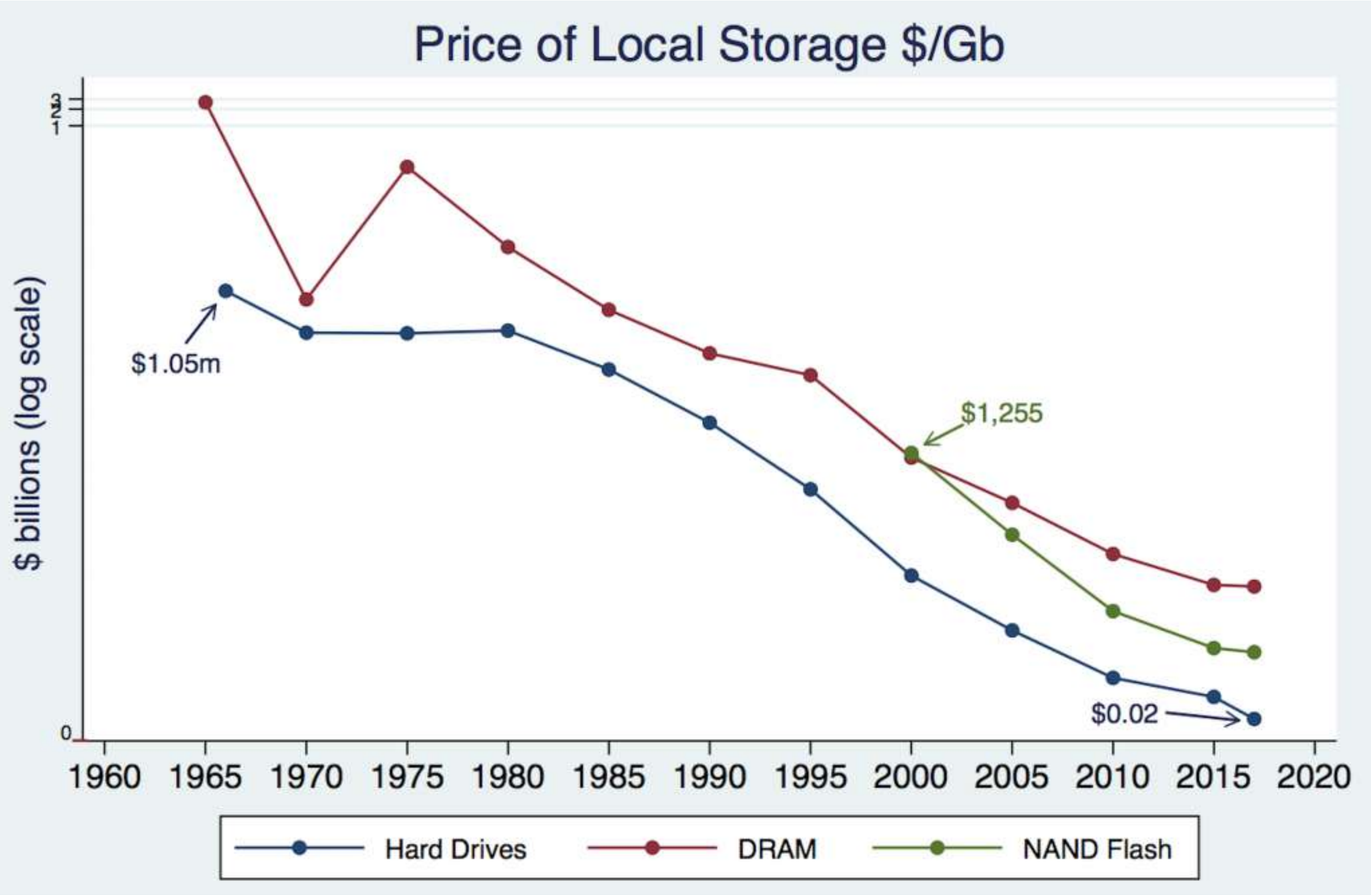
HOW DID DATA TURN FROM AN I.T. TO A COMEX TOPIC?



FACTOR 1:
THE EXPONENTIAL GROWTH OF PRODUCED & AVAILABLE DATA

According to IBM, 90% of all the world's data was created in the past 2 years.
Networks and Open Data expand their accessibility.

FACTOR 2:
THE COLLAPSE OF MASS DATA STORAGE AND PROCESSING COSTS

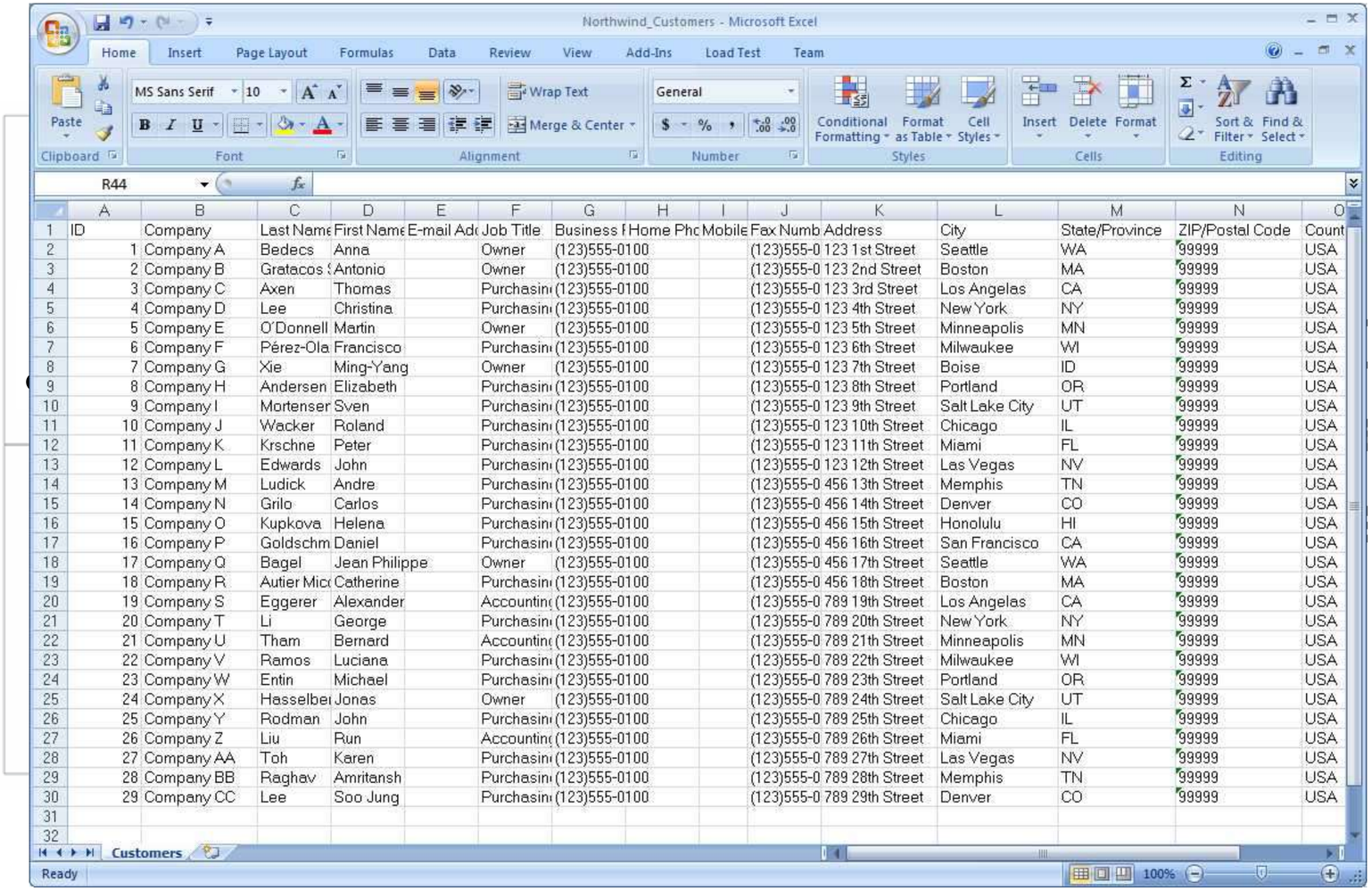


Storage cost per Gigabyte:

- $ 1 million in 1965
- $ 17 in 2000
- $ 0.01 in 2020

(-40%/year)

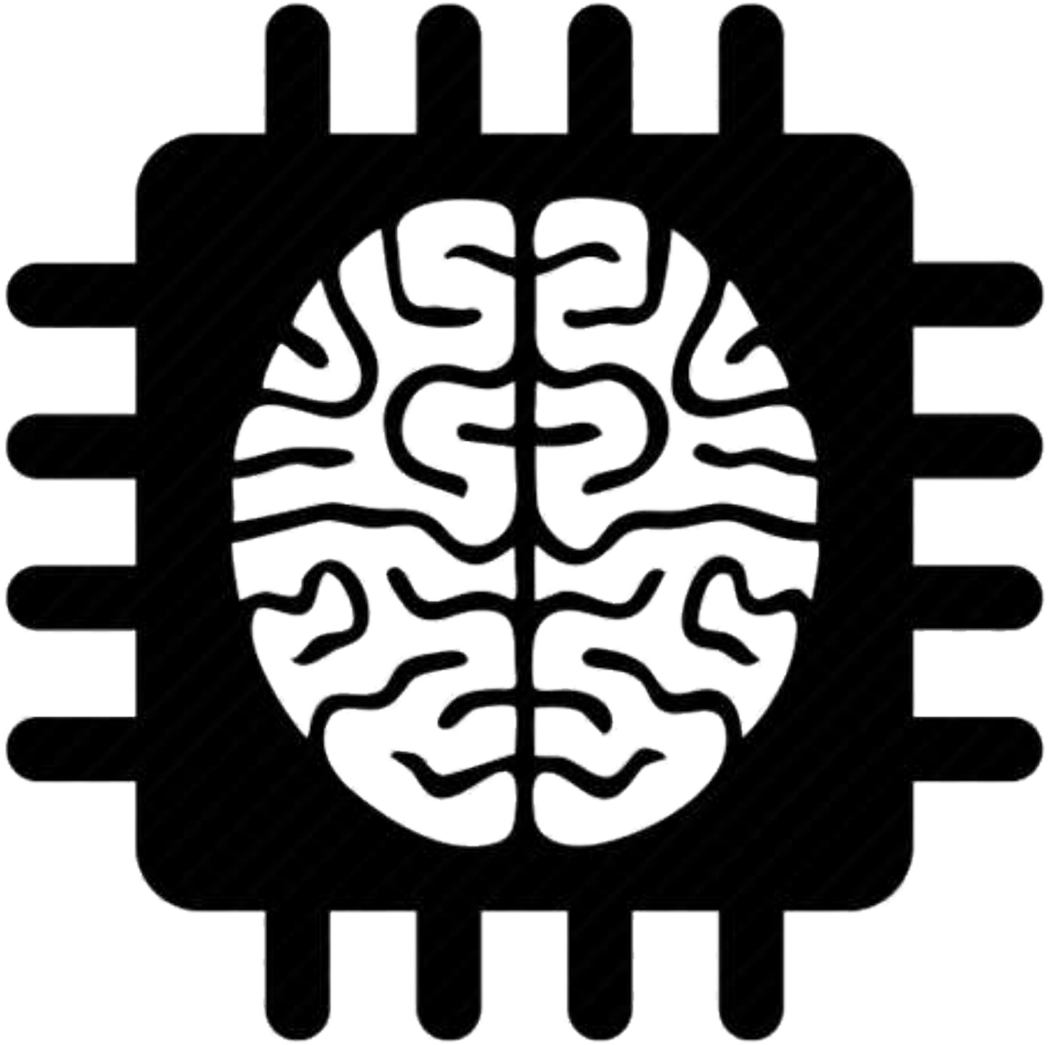
FACTOR 3:
THE LARGE-SCALE CAPACITY TO PROCESS UNSTRUCTURED DATA



ID	Company	Last Name	First Name	E-mail Add	Job Title	Business F	Home Pho	Mobile	Fax Numb	Address	City	State/Province	ZIP/Postal Code	Count
1	Company A	Bedecs	Anna		Owner	(123)555-0100			(123)555-0	123 1st Street	Seattle	WA	99999	USA
2	Company B	Gratacos S	Antonio		Owner	(123)555-0100			(123)555-0	123 2nd Street	Boston	MA	99999	USA
3	Company C	Axen	Thomas		Purchasin	(123)555-0100			(123)555-0	123 3rd Street	Los Angelas	CA	99999	USA
4	Company D	Lee	Christina		Purchasin	(123)555-0100			(123)555-0	123 4th Street	New York	NY	99999	USA
5	Company E	O'Donnell	Martin		Owner	(123)555-0100			(123)555-0	123 5th Street	Minneapolis	MN	99999	USA
6	Company F	Pérez-Ola	Francisco		Purchasin	(123)555-0100			(123)555-0	123 6th Street	Milwaukee	WI	99999	USA
7	Company G	Xie	Ming-Yang		Owner	(123)555-0100			(123)555-0	123 7th Street	Boise	ID	99999	USA
8	Company H	Andersen	Elizabeth		Purchasin	(123)555-0100			(123)555-0	123 8th Street	Portland	OR	99999	USA
9	Company I	Mortensen	Sven		Purchasin	(123)555-0100			(123)555-0	123 9th Street	Salt Lake City	UT	99999	USA
10	Company J	Wacker	Roland		Purchasin	(123)555-0100			(123)555-0	123 10th Street	Chicago	IL	99999	USA
11	Company K	Krschne	Peter		Purchasin	(123)555-0100			(123)555-0	123 11th Street	Miami	FL	99999	USA
12	Company L	Edwards	John		Purchasin	(123)555-0100			(123)555-0	123 12th Street	Las Vegas	NV	99999	USA
13	Company M	Ludick	Andre		Purchasin	(123)555-0100			(123)555-0	456 13th Street	Memphis	TN	99999	USA
14	Company N	Grilo	Carlos		Purchasin	(123)555-0100			(123)555-0	456 14th Street	Denver	CO	99999	USA
15	Company O	Kupkova	Helena		Purchasin	(123)555-0100			(123)555-0	456 15th Street	Honolulu	HI	99999	USA
16	Company P	Goldschm	Daniel		Purchasin	(123)555-0100			(123)555-0	456 16th Street	San Francisco	CA	99999	USA
17	Company Q	Bagel	Jean Philippe		Owner	(123)555-0100			(123)555-0	456 17th Street	Seattle	WA	99999	USA
18	Company R	Autier Mic	Catherine		Purchasin	(123)555-0100			(123)555-0	456 18th Street	Boston	MA	99999	USA
19	Company S	Eggerer	Alexander		Accountin	(123)555-0100			(123)555-0	789 19th Street	Los Angelas	CA	99999	USA
20	Company T	Li	George		Purchasin	(123)555-0100			(123)555-0	789 20th Street	New York	NY	99999	USA
21	Company U	Tham	Bernard		Accountin	(123)555-0100			(123)555-0	789 21th Street	Minneapolis	MN	99999	USA
22	Company V	Ramos	Luciana		Purchasin	(123)555-0100			(123)555-0	789 22th Street	Milwaukee	WI	99999	USA
23	Company W	Entin	Michael		Purchasin	(123)555-0100			(123)555-0	789 23th Street	Portland	OR	99999	USA
24	Company X	Hasselber	Jonas		Owner	(123)555-0100			(123)555-0	789 24th Street	Salt Lake City	UT	99999	USA
25	Company Y	Rodman	John		Purchasin	(123)555-0100			(123)555-0	789 25th Street	Chicago	IL	99999	USA
26	Company Z	Liu	Run		Accountin	(123)555-0100			(123)555-0	789 26th Street	Miami	FL	99999	USA
27	Company AA	Toh	Karen		Purchasin	(123)555-0100			(123)555-0	789 27th Street	Las Vegas	NV	99999	USA
28	Company BB	Raghav	Amritansh		Purchasin	(123)555-0100			(123)555-0	789 28th Street	Memphis	TN	99999	USA
29	Company CC	Lee	Soo Jung		Purchasin	(123)555-0100			(123)555-0	789 29th Street	Denver	CO	99999	USA

Structured data:
Data that is formatted and classified according to a predefined organization (in a file / a database).

FACTOR 4:
THE IMPRESSIVE TAKING-OFF OF A.I.



Artificial Intelligence
has finally taken off
after the “winter” of the 70s & 80s:

Analysis and processing of
massive structured and
unstructured data
(texts, sounds, images, video);

Ssimulation and automatisation
of cognitive tasks…

NEOFACE

2013

Technology using cameras, computers, the cloud and artificial intelligence to identify customers and create real-time statistics on a crowd of visitors (gender, age, visits...).

NETEXPLO

CLOVERLEAF SHELFPOINT

This startup used dynamic on-shelf displays.

Thanks to AI, an integrated optical sensor detects not only the shopper’s age range and gender, but also their emotional state. The on-shelf display adjusts accordingly.

More than a promotional tool, it produces a mass of data on shelves’ availabilities and customer behavior.

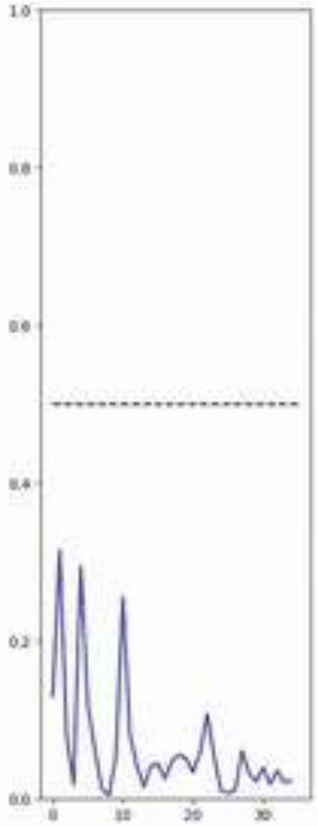
NETEXPLO

VEESION
France

Shoplifting represents 3.5 €B
in France + a 5.8 €B cost
for security.

Efficiency: 5%.

Veesion brings AI to the detection
of shoplifting in stores,
by analyzing video real time and
by alerting security staff.

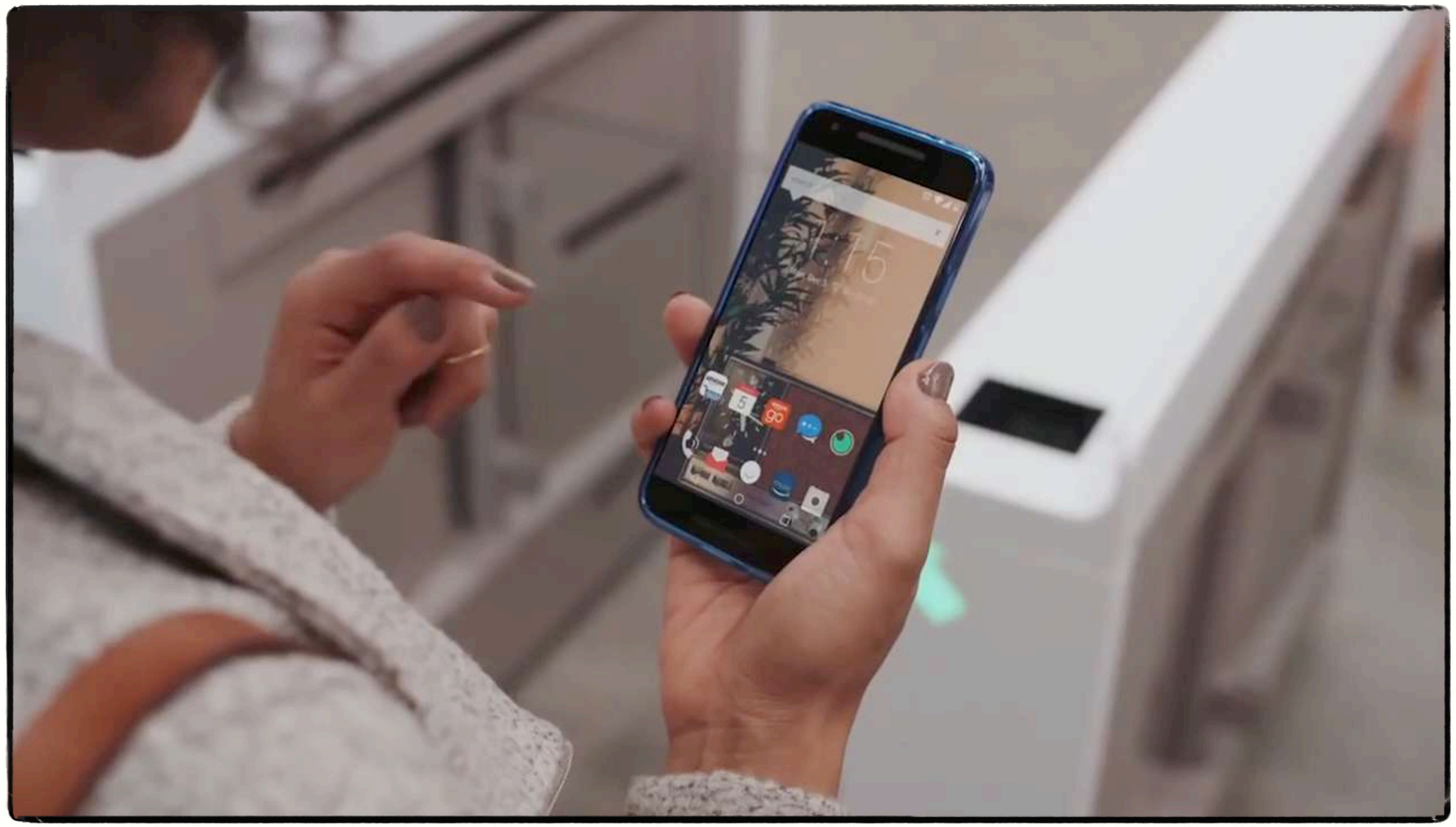


AMAZON GO

Amazon Go is a cash-free supermarket where you only need to open your app when arriving , then you pick up the products you want and leave.

The technology is not based on RFID but on visual recognition and AI.

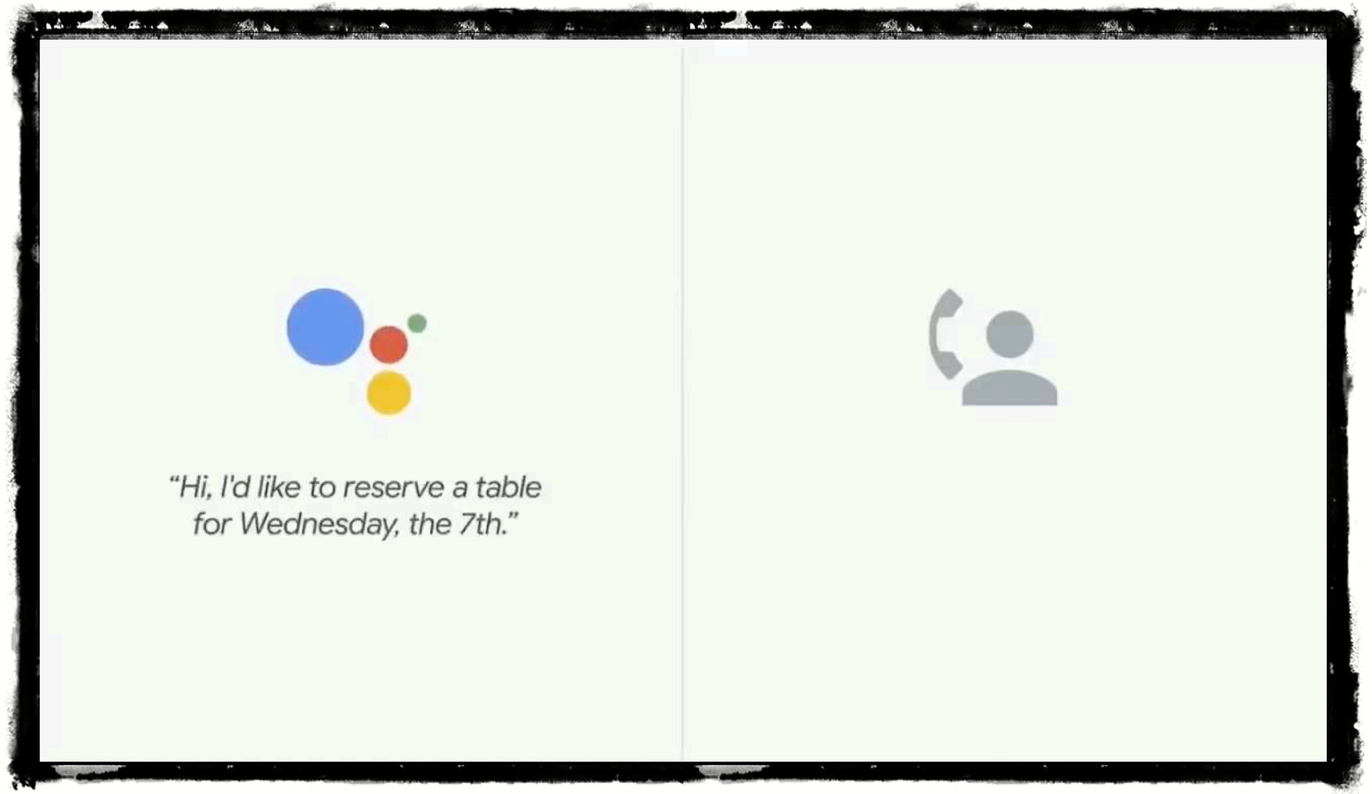
It changes your experience of a store and its business model.



NETEXPLO

GOOGLE ASSISTANT

This product simulates humans so well that they can pass as customers trying to make an appointment at a restaurant or hairdresser.



NETEXPLO

THE GAME-CHANGING TECHNOLOGICAL ACCELERATION FOR BUSINESSES

The exponential growth of produced and available data

The collapse of mass data storage and processing costs

The large-scale capacity to process unstructured data

The impressive taking off of A.I.

INNOVATION VERSUS OPTIMIZATION?

WHAT IS
DATA TRANSFORMATION?

How do companies *innovate in the way they do business*

by leveraging data technologies

to increase their productivity,
to improve their competitiveness,
and to create more value for their customers.

INNOVATION VS OPTIMIZATION?

INVENTING AND INNOVATING

Invention is the creation of something new.

Innovation is a new (and better) way to solve a problem.

Innovation does not mean

Revolution vs Optimisation

but

New & better way vs ‘Business as usual’

THE ORGANIZATIONAL CHALLENGE

RECONCILING TOP-DOWN & BOTTOM-UP

Vision does not define innovation, it asserts commitment, gives a direction, sets objectives.

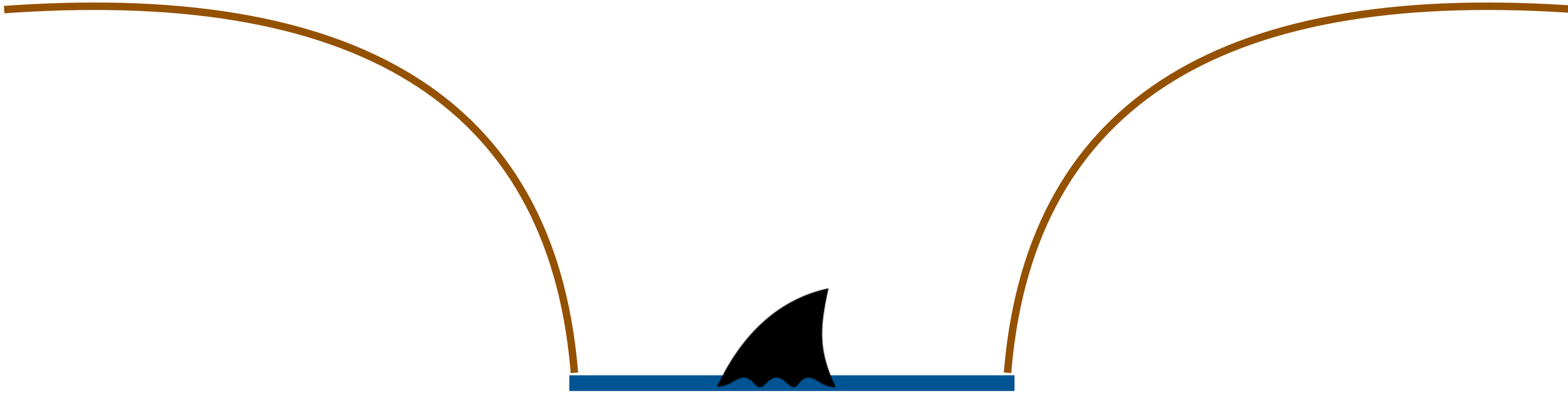
Tech, data and project governances make it possible to support, guide and measure.

Practical projects generated at the corporate level, from businesses and local experiments.

CROSSING THE CHASM OF INNOVATION

Exploration

Exploitation



AMBIDEXTERITY (OPPOSITE COMPETENCIES)

March (1991), Tushman & O'Reilly (1996, 2004)…

Exploitation: Streamlining processes, focus on efficiency and short-term incremental improvements

Exploration is the opposite: trying new stuff, entering new fields, iterating, failing, trying again…

ILLUSTRATION: THE I.T. BOTTLENECK

The role and responsibility of I.T. managers: security, reliability and standardisation.

POC: “quick and dirty”

Frustration… for all, unless backbone IS and agile IS are distinguished and managed differently.

ILLUSTRATION: SIMPLIFICATION

A major mistake is to insert data tools into complicated or suboptimal processes.

Addressing the problem means assessing current processes.

Data transformation is very much a lever for organizational change… (therein the difficulty).

ILLUSTRATION: THE STIGMA OF FAILURE

Innovation means risk.

Risk means a high likelihood to fail.

We don’t know to differentiate *failure* from *fault*
and how to *manage* failure…

REGARDING THE ‘RIGHT TO MAKE MISTAKES’

To support innovation and risk-taking, an idea is to promote a ‘right to make mistakes.’

But what is an acceptable or an unacceptable mistake?

And reconsidering or stopping an exploratory project is not a ‘mistake,’ but the potential outcome of a sound test & learn process.

“We should not promote an ambiguous “right to make mistakes,” but rather a ‘duty to test.’”

Pr. Adilson Borges

MANAGING AN *INNOVATIVE* PROJECT IS FUNDAMENTALLY DIFFERENT FROM MANAGING A ‘BUSINESS AS USUAL’ PROJECT

Pr. Sihem Jouini

HEC PARIS

“In a ‘business as usual’ project, we know the environment, the context and the key variables.

The issue is mainly operational and relies on the capacity to deliver.

As there are few uncertainties, we successfully plan the project.

We manage risk by looking at the gaps between what is planned and what is delivered.”

MANAGING AN *INNOVATIVE* PROJECT IS FUNDAMENTALLY DIFFERENT FROM MANAGING A 'BUSINESS AS USUAL' PROJECT

Pr. Sihem Jouini

HEC PARIS

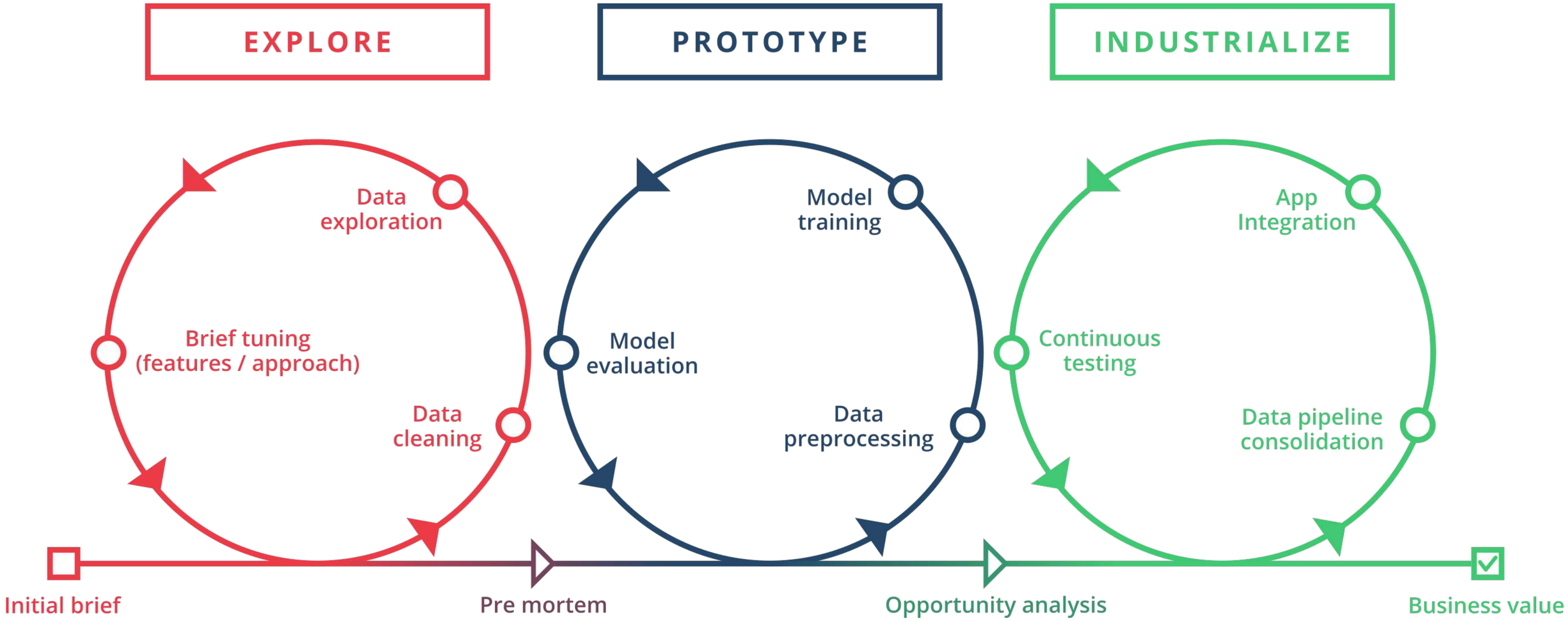
"In its essence, an *innovative* project is *explorative*. It deals with *uncertainty*: we don't know in advance whether the project can be successfully delivered.

As the project develops, knowledge is substituted for uncertainty: it is a learning process.

We manage uncertainty by making hypotheses about the problem to be addressed and the ways to solve it. Managing the project consists in gradually testing the hypotheses.

That's why we have to experiment, validate, review and reiterate based on the results."

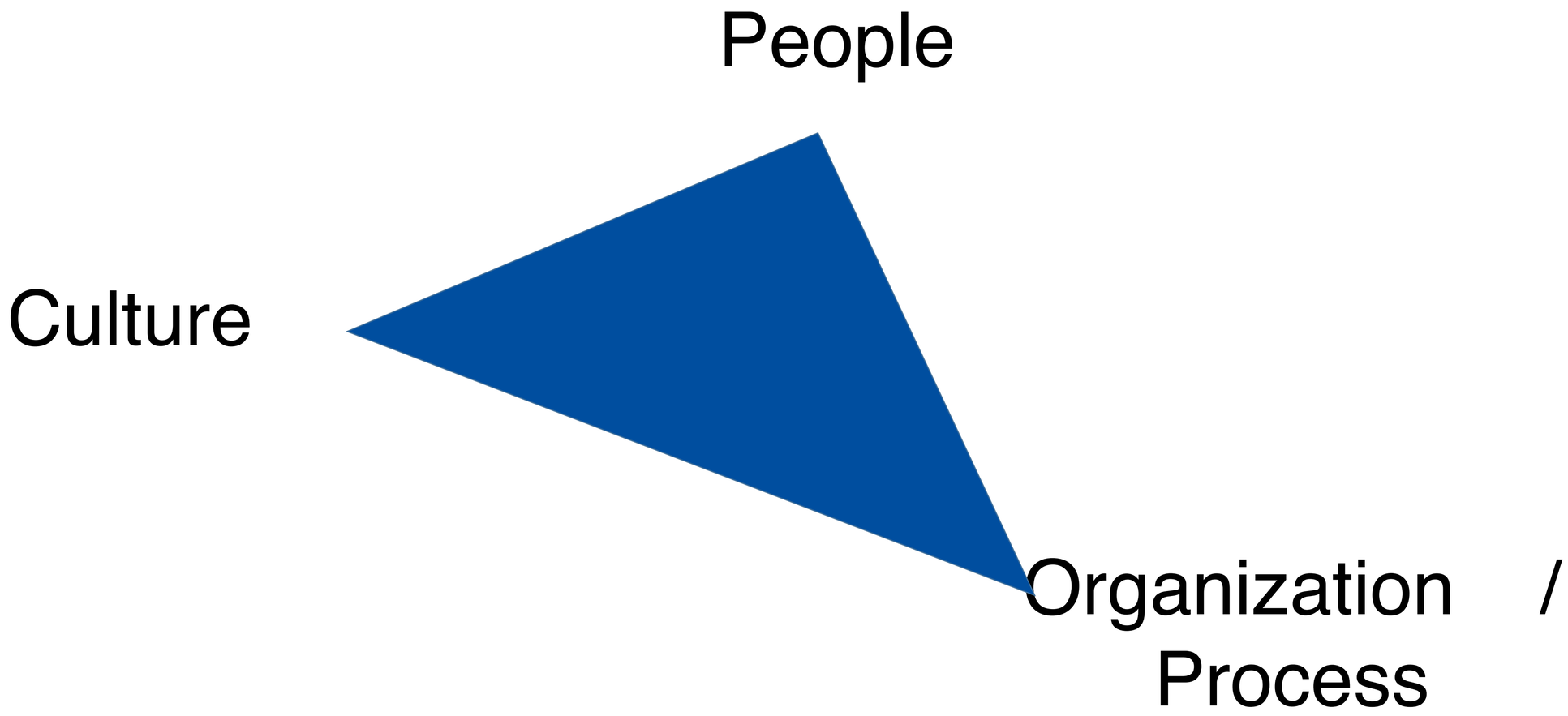
THE 3 STAGES OF AN INNOVATIVE PROJECT



THE USE OF MORE AGILE METHODS

- *Business driven*
- Focus on creating value to the customer/user (*cf. problem*)
- Co-development in mixed project teams: Project Manager/ Business / Experts (data, SI…) + Users
- Dynamic, methodic et opportunistic steering
- Breaking up in short cycles enabling tests and iterations (*cf. scrum*).

3 INTERDEPENDENT KEY FACTORS



THE RISK OF CONTRADICTORY INSTRUCTIONS

A manager manages :

- daily business
- performance
- objectives
- policy application
- reporting
- safety
- incidents
- team cohesion
- team development
- well being at work…

A manager controls and apply.

And must be agile, forward-thinking and disruptive.

With the vision,
comes the commitment
to create the corporate
environment that reconciles
exploration and exploitation.