



Google

For whom?

Impact of digital on the Retail industry



Google in Belgium

Google in Belgium



Service
Belgium



EU
Policy



Data
Centre

Data center in Belgium





Google & Alphabet

1998

Google!

Search the web using Google!

10 results



Google Search

I'm feeling lucky

Index contains ~25 million pages (soon to be much bigger)

[About Google!](#)

[Stanford Search](#) [Linux Search](#)

Get Google! updates monthly!

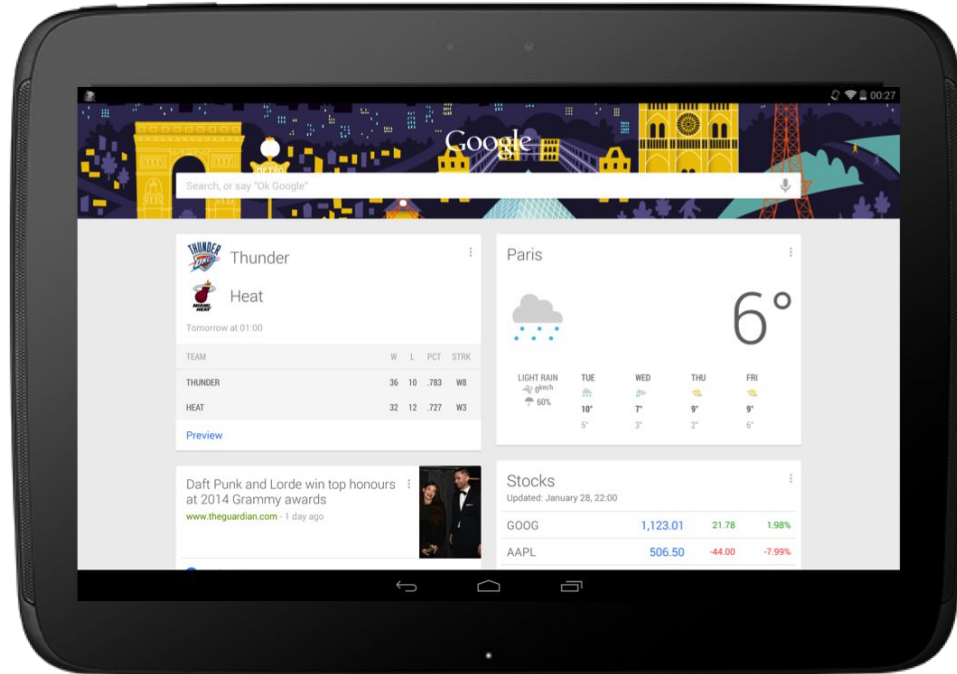
your e-mail

Subscribe

[Archive](#)

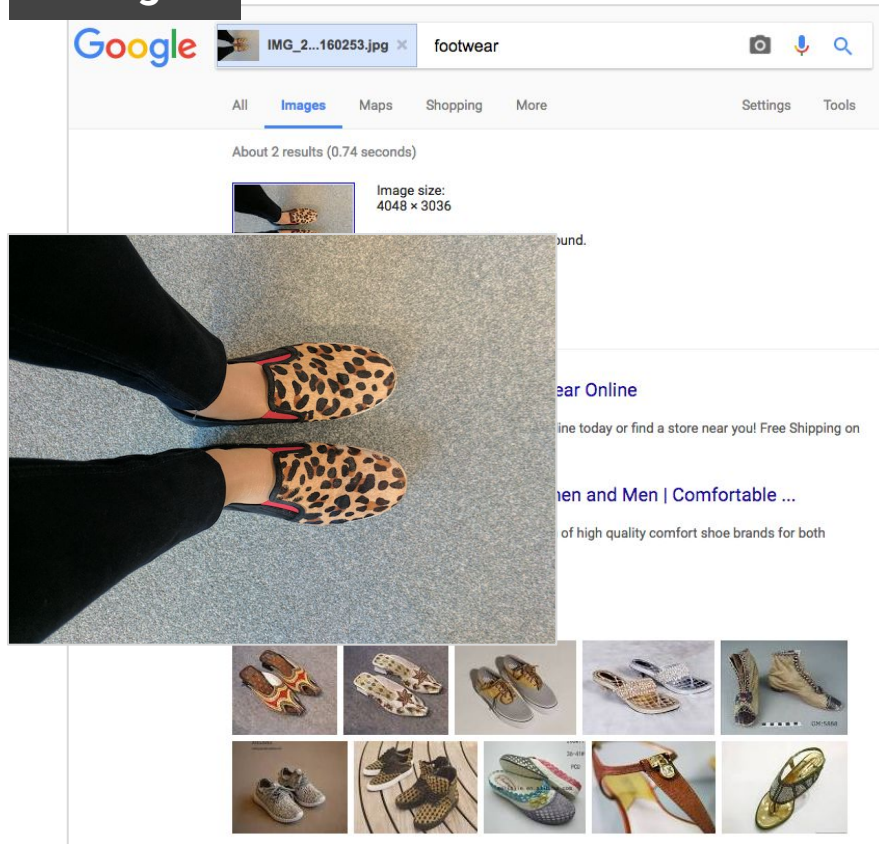
Copyright ©1997-8 Stanford University

2017



Google Search - Evolutions

Image



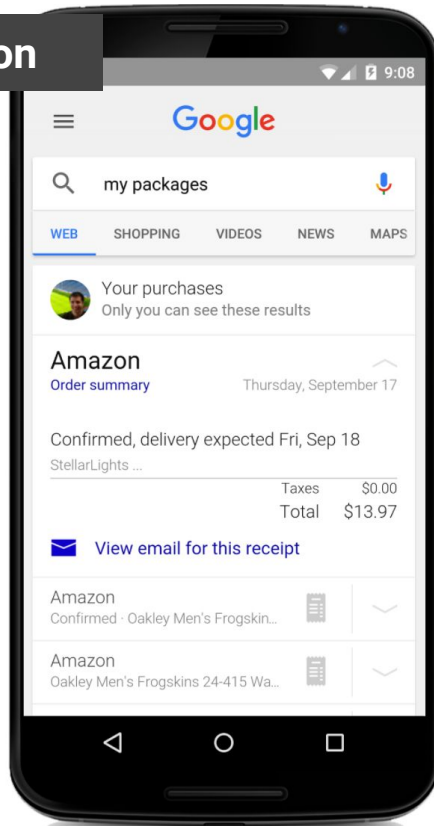
Voice



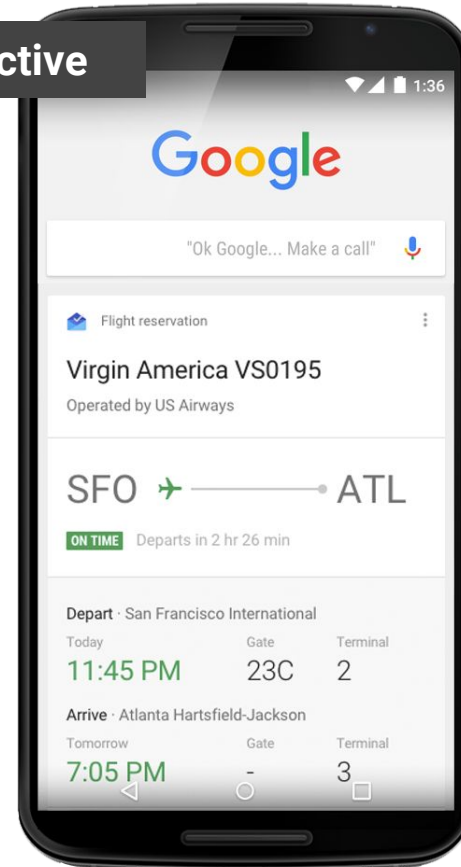
Google Search - Evolutions



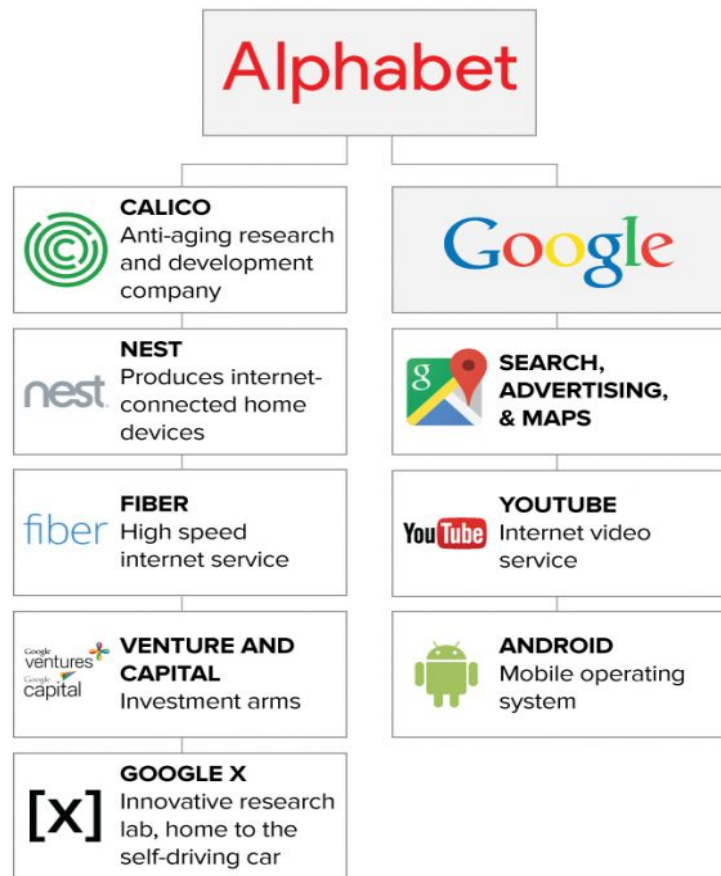
Connection



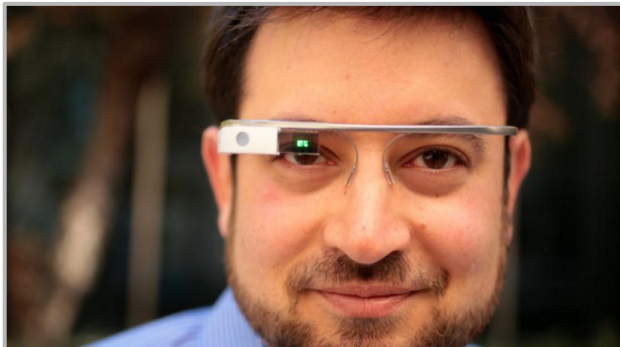
Predictive



Alphabet Group & Google



Alphabet projects



7 apps with +1bio reach

1B+

1B+

1B+

1B+

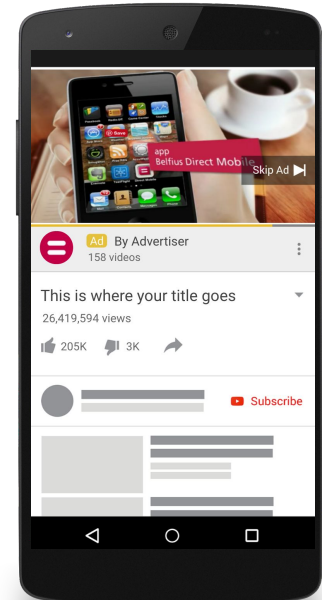
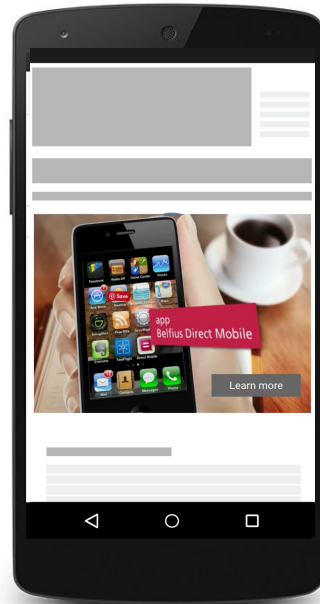
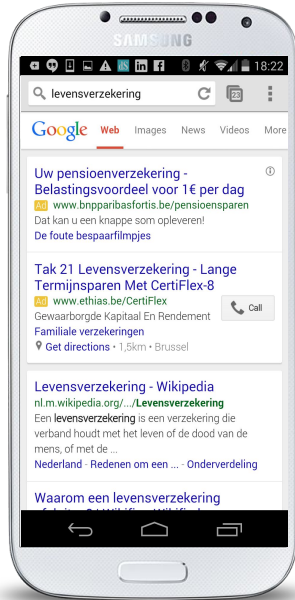
1B+

1B+

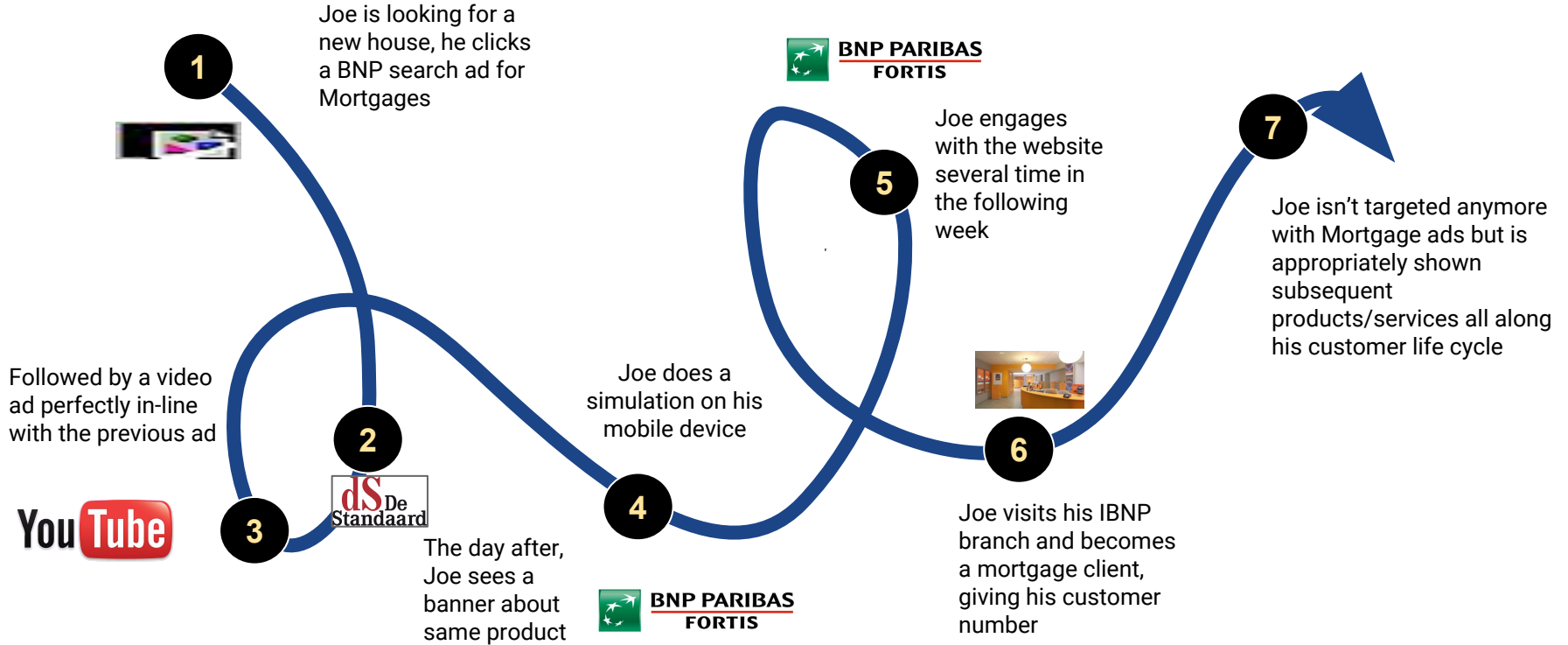
1B+



From Basic media solutions



Programmatic



Strategic focus on Artificial Intelligence & Machine Learning



Google Home



Rules and contingencies

Write a computer program with *explicit rules* to follow

```
if email contains V!agrå  
    then mark is-spam;  
if email contains ...  
if email contains ...
```

Machine Learning

Write a computer program to *learn from examples*

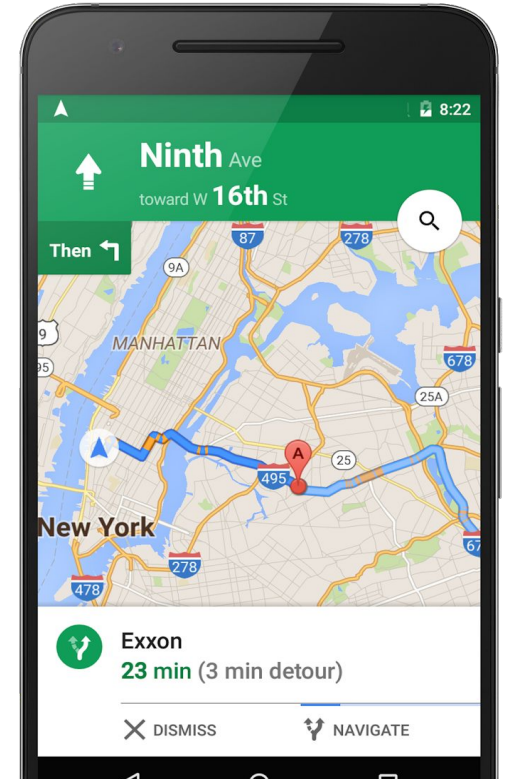
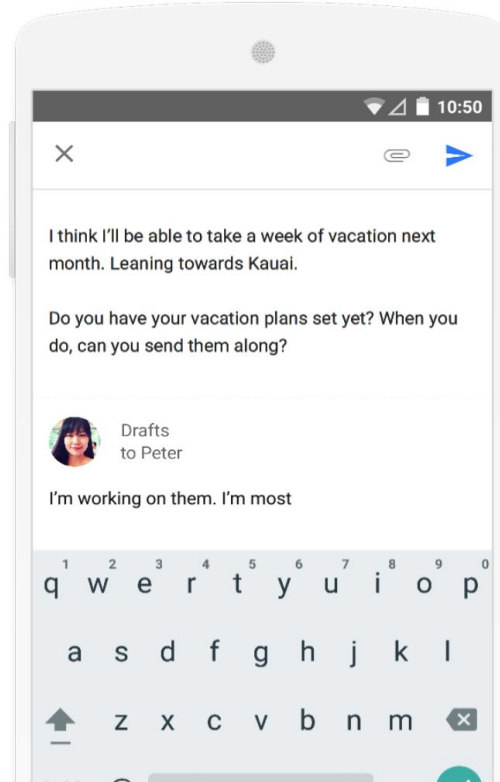
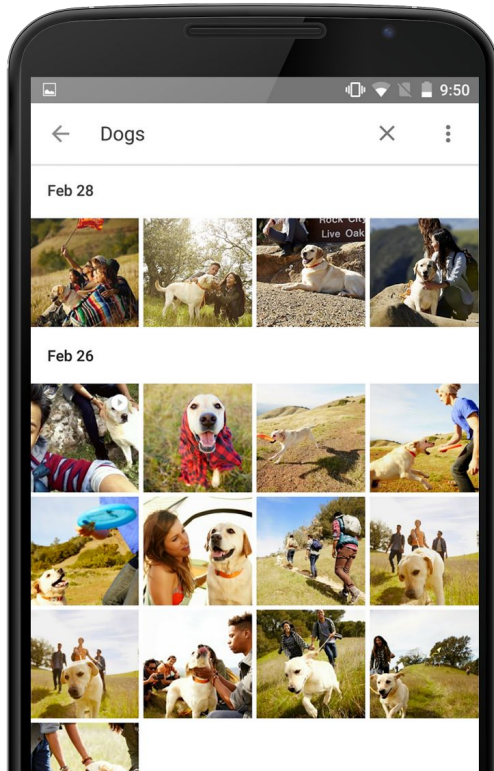
```
try to classify some emails;  
  
change self to reduce errors;  
  
repeat;
```

Machine Learning - Example of image recognition

Chihuahua
or
muffin?



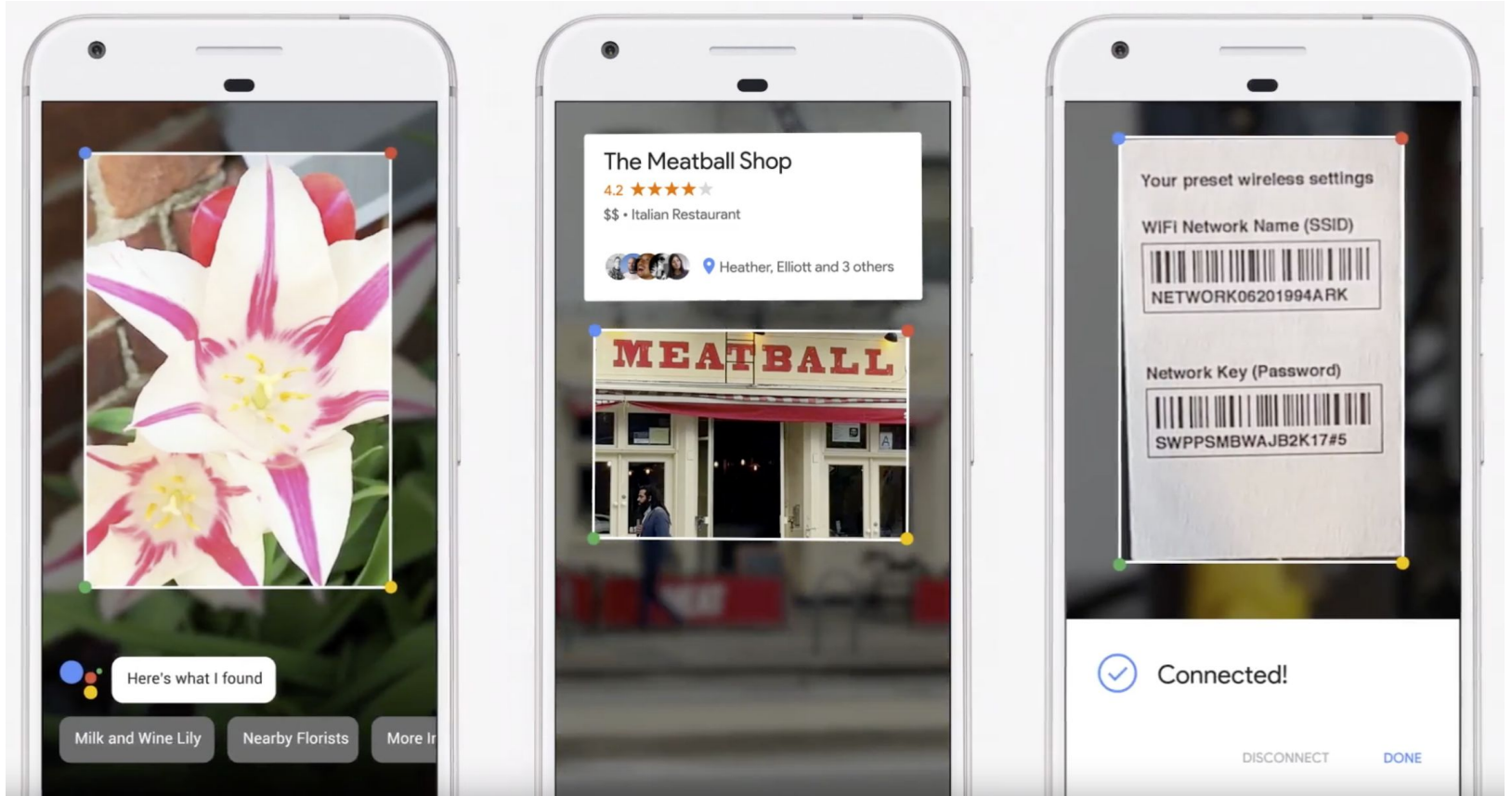
Artificial Intelligence & Machine Learning - Google applications



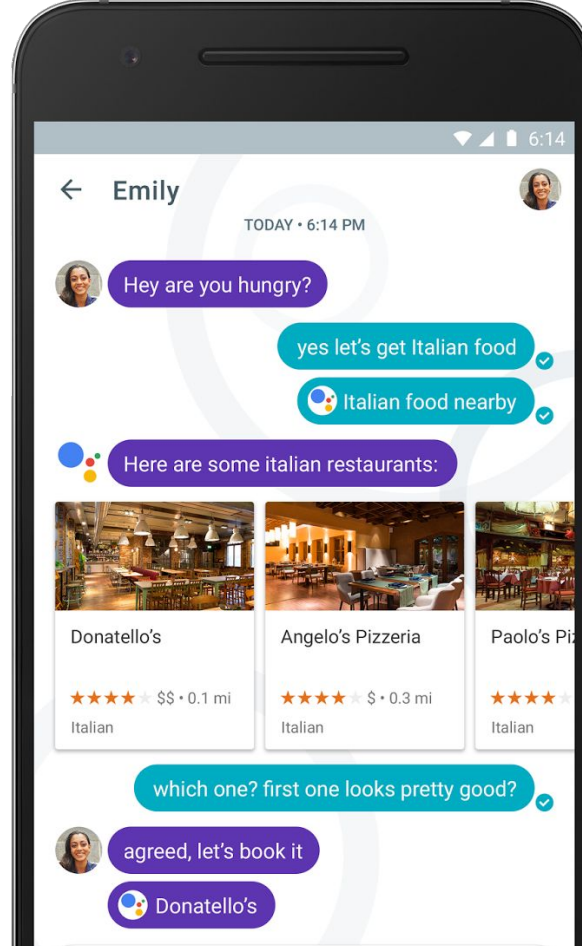
Artificial Intelligence & Machine Learning - Google applications



Google Lens



Artificial Intelligence & Machine Learning - Google applications



Artificial Intelligence & Machine Learning - Google applications

The screenshot displays a Google Sheets spreadsheet with the following data:

OVERVIEW

	Q1	Q2	Q3
Sales	\$47,893.00	\$98,294.00	\$99,120.00
Costs	\$35,120.00	\$45,937.00	\$17,914.00
Net Profit	\$9,885.00	\$9,937.00	\$1,206.00

EXPENSES

Labor Expenses

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Wages	\$41,270.91	\$42,706.03	\$43,198.08	\$41,804.27	\$42,387.80	\$42,990.57	\$42,274.27	\$42,075.94	\$41,324.80
Health Benefits	\$2,345.15	\$2,343.43	\$2,345.03	\$2,250.15	\$2,248.88	\$2,258.37	\$2,237.73	\$2,241.53	\$2,252.08
Workers Comp Insurance	\$467.34	\$479.12	\$465.30	\$463.24	\$473.88	\$481.73	\$476.21	\$471.00	\$473.29
Payroll Taxes	\$2,449.18	\$2,426.23	\$2,479.17	\$2,468.98	\$2,445.91	\$2,418.37	\$2,456.10	\$2,401.24	\$2,493.31
Labor Totals	\$46,433.59	\$47,854.80	\$48,387.58	\$46,986.61	\$47,561.28	\$48,048.85	\$47,444.31	\$47,199.71	\$46,861.00

Overhead Expenses

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Loan Payment	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00
Permits	\$2,365.00	\$2,365.00	\$2,365.00	\$2,365.00	\$2,365.00	\$2,365.00	\$2,365.00	\$2,365.00	\$2,365.00
Truck maintenance	\$1,129.00	\$311.00	\$818.00	\$267.00	\$662.00	\$618.00	\$730.00	\$937.00	\$730.00
Gas	\$524.00	\$525.00	\$481.00	\$420.00	\$580.00	\$200.00	\$434.00	\$473.00	\$434.00

2015 Budget - Itemized Expense Tracking



Google Translate



Artificial Intelligence & Machine Learning - Google applications

The image shows a Google Lens search interface. The central image is a yellow diamond-shaped sign with a kangaroo silhouette on a branch, and a rectangular sign below it that reads "TREE KANGAROOS CROSSING NEXT 2km". To the left, there is a vertical strip of image search results, including a speed limit sign with "30" and "CON VALLEY ENCLONDA". At the bottom left, it says "80,687 IMAGES". On the right, a dark overlay displays classification results with progress bars and confidence scores.

LABEL	Confidence Score
Sign	0.94
Road	0.90
Traffic sign	0.90
Yellow	0.85
Street sign	0.82
Wildlife	0.79
Signage	0.77
Geological phenomenon	0.56

TEXT

“ TREE

Graphical JSON

Artificial Intelligence & Machine Learning - Google applications





Digital in the world

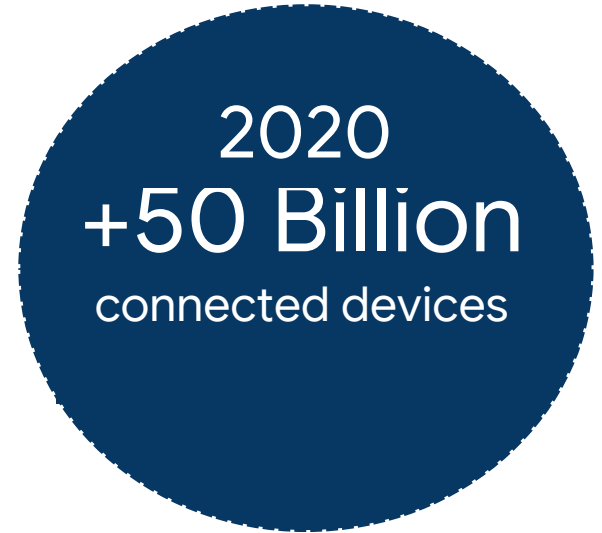
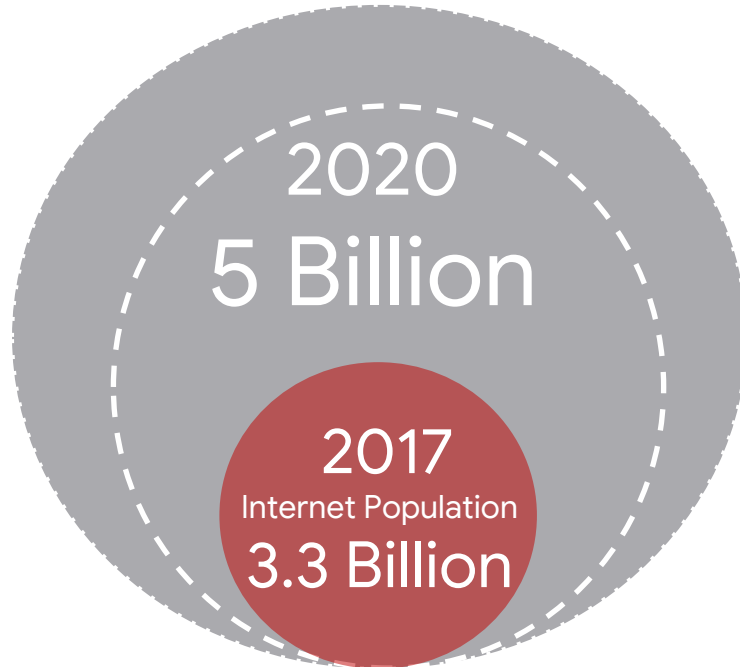
From generation...



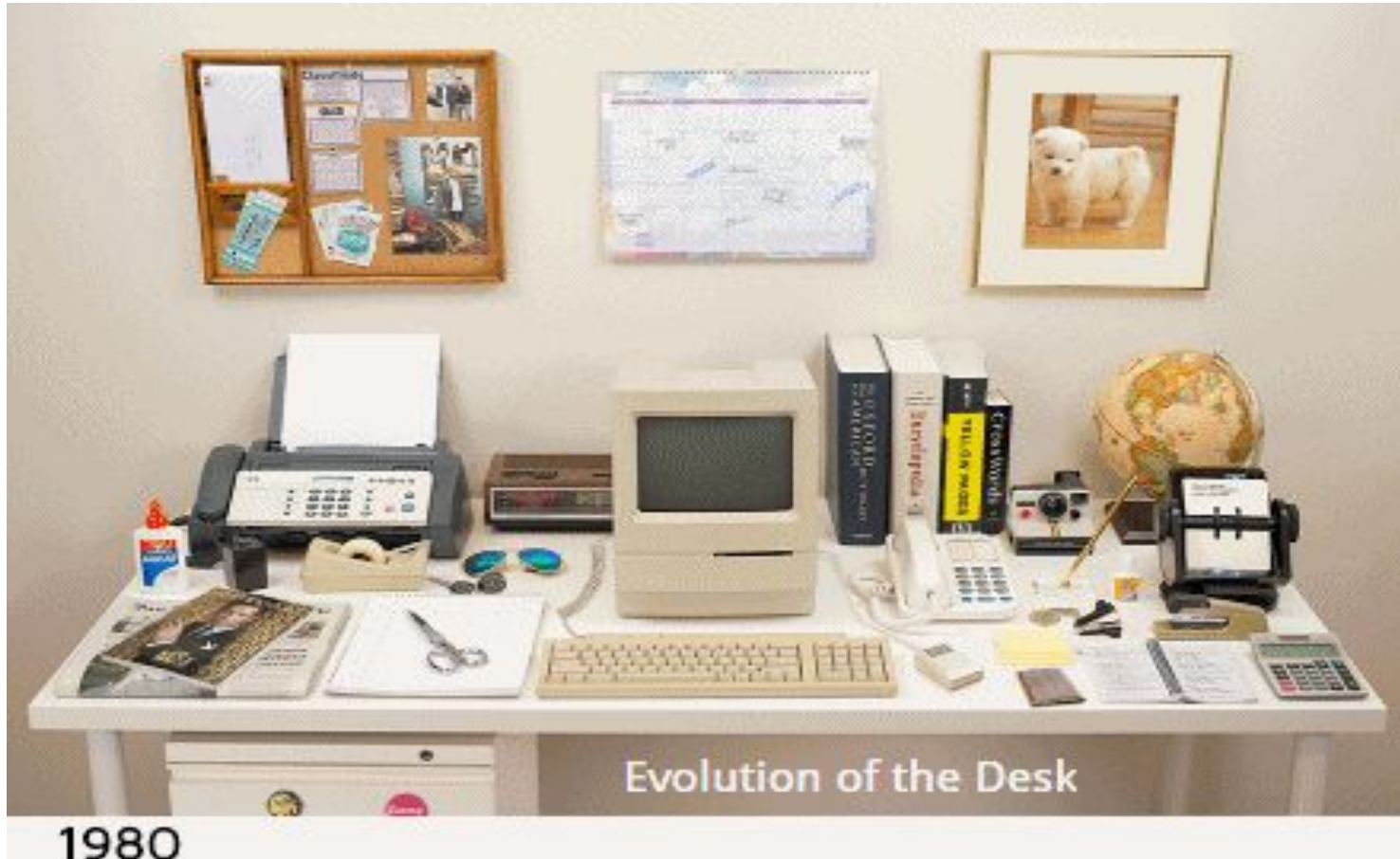
To another...



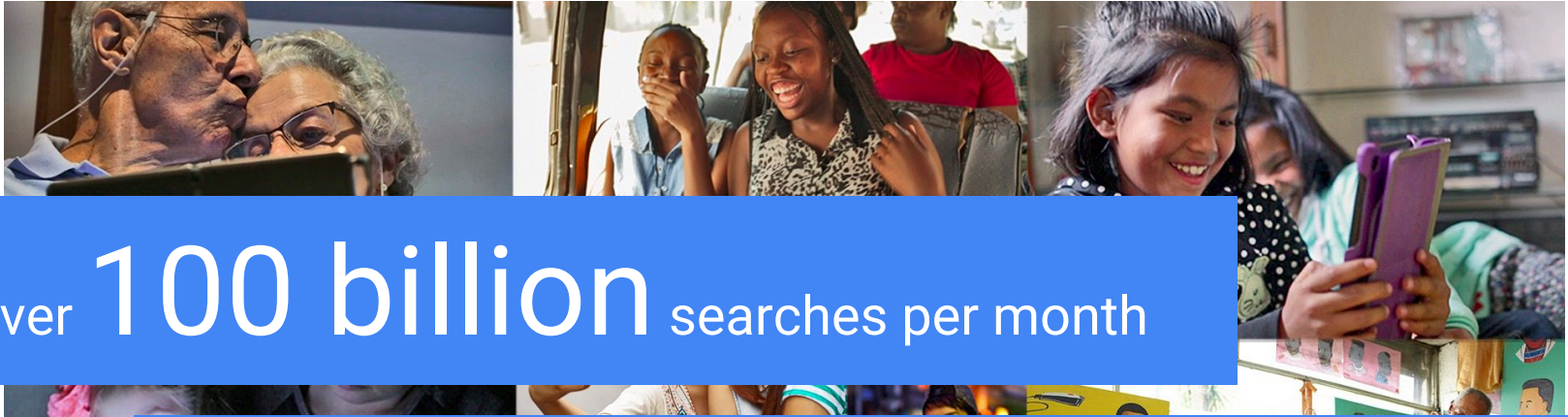
Internet on the globe



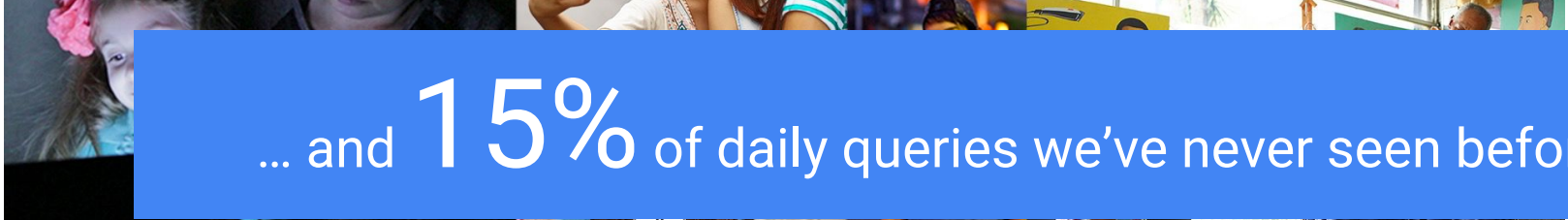
Work is shifting too



Online searches on the globe



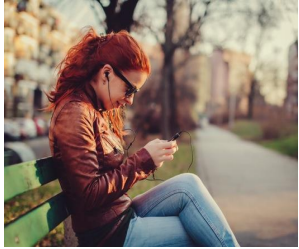
Over **100 billion** searches per month



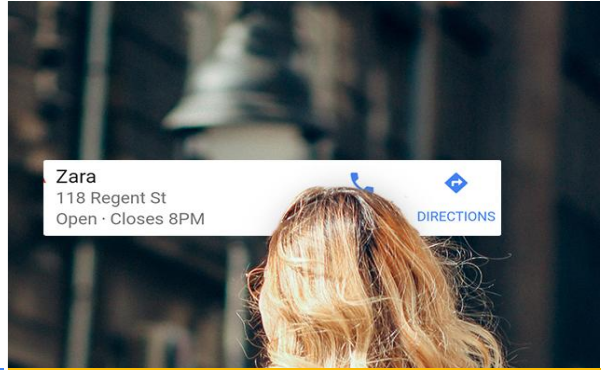
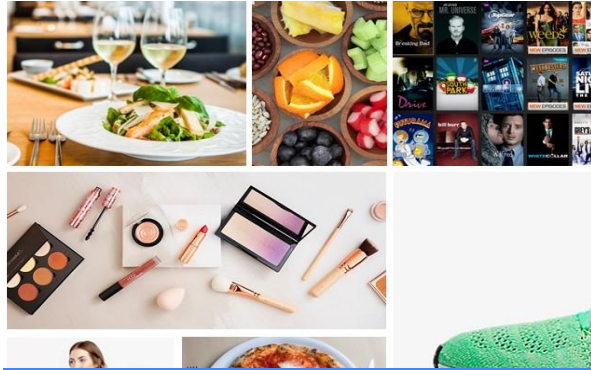
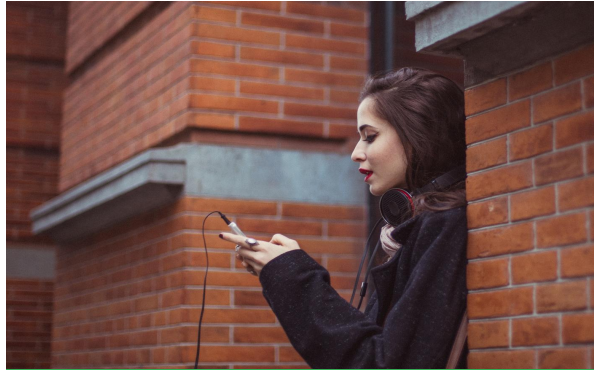
... and **15%** of daily queries we've never seen before



We don't go online, we live online



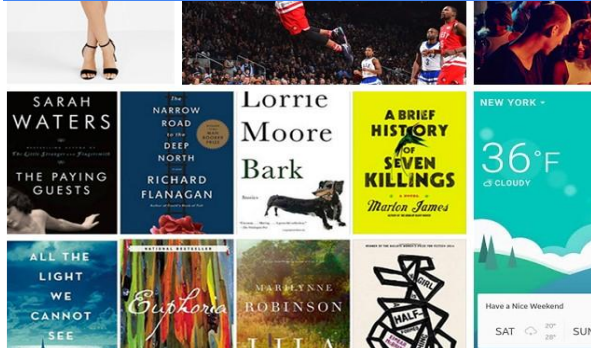
Consumer getting digitally demanding



Be There
CONNECTIVITY

Be Valuable
DATA

Be Quick
AUTOMATION





Digital in Belgium

The Belgian paradox



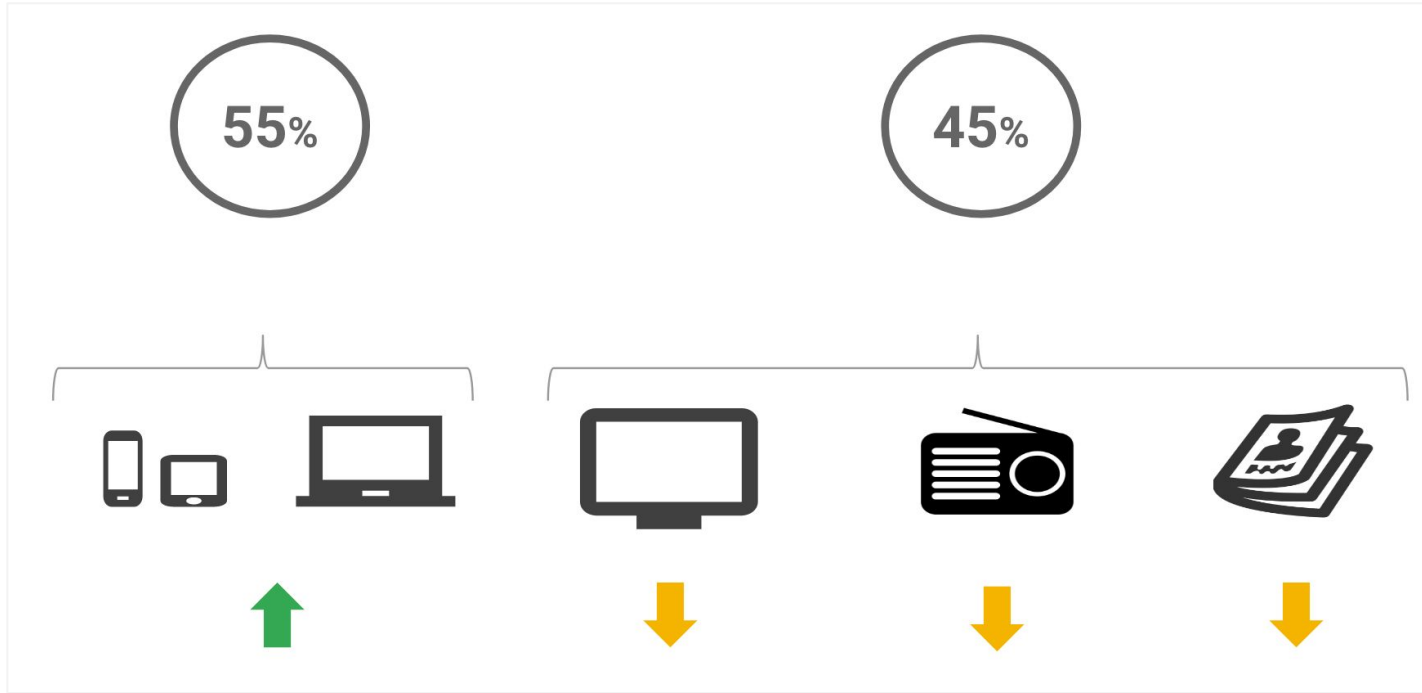
the
paradox
of the internet in Belgium

people
are much
more

connected

than
businesses

Digital consumption in Belgium



Digital consumption in Belgium

**% of people who use a
smartphone**

71%

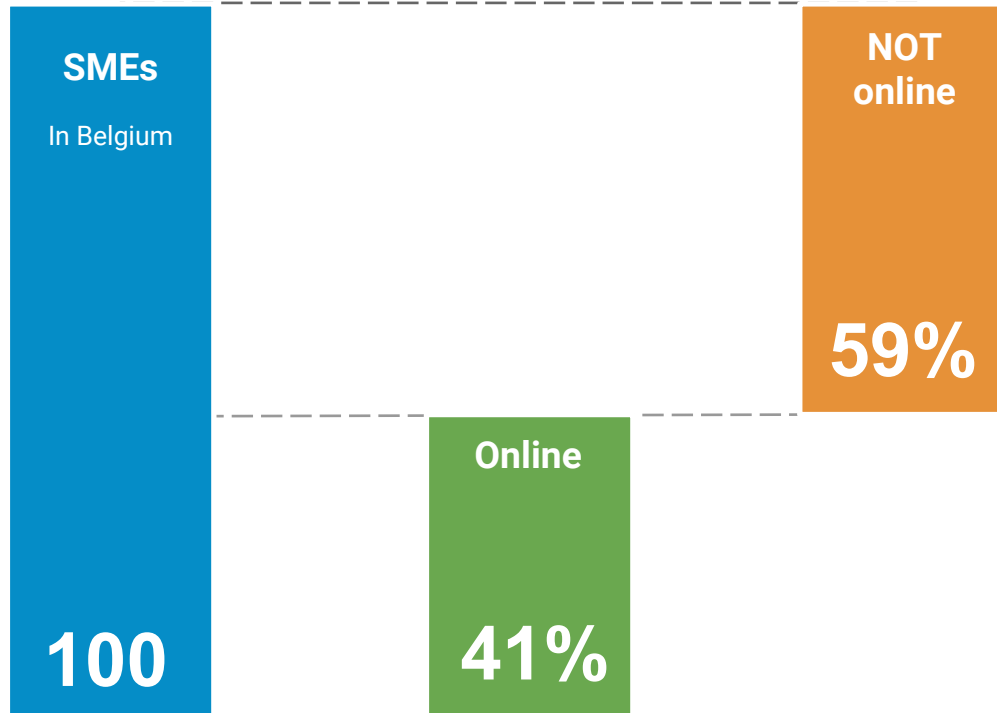
**% of people who internet more
via smartphone**

56%

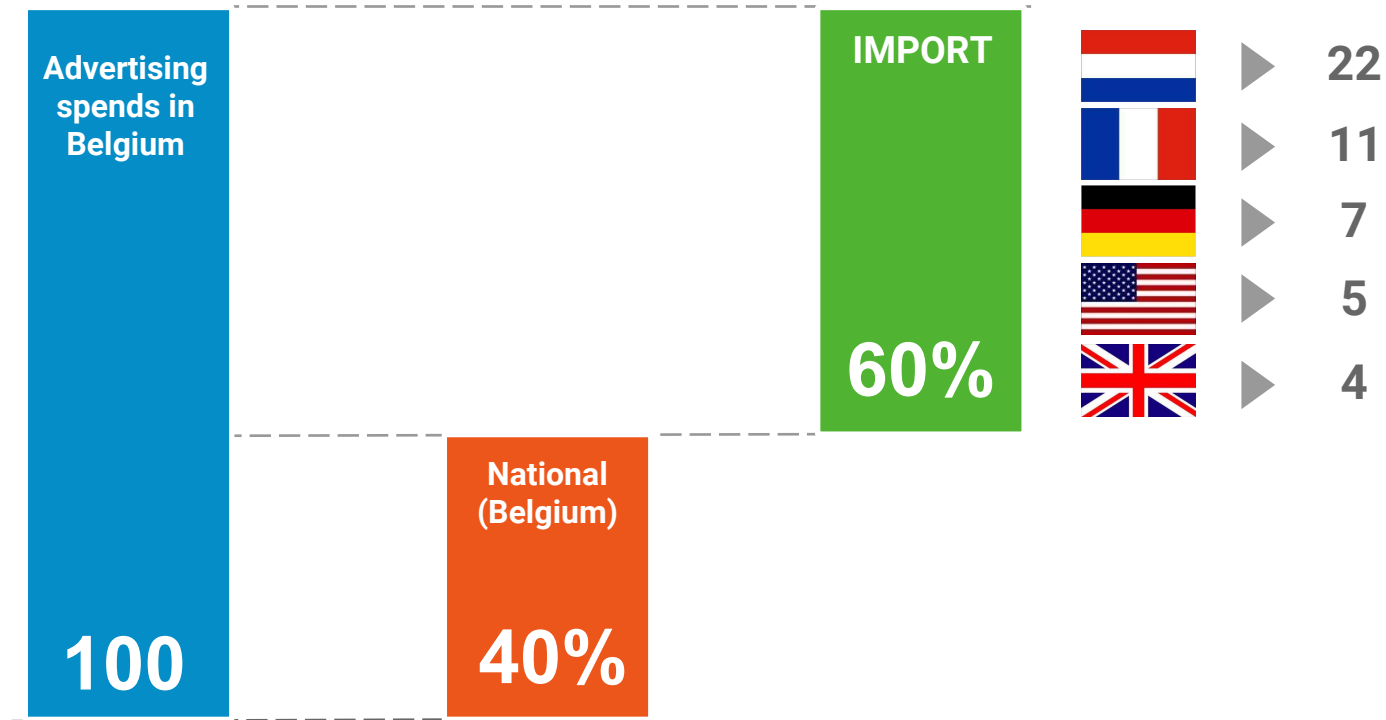
**Avg number of connected
devices per person**

2,9

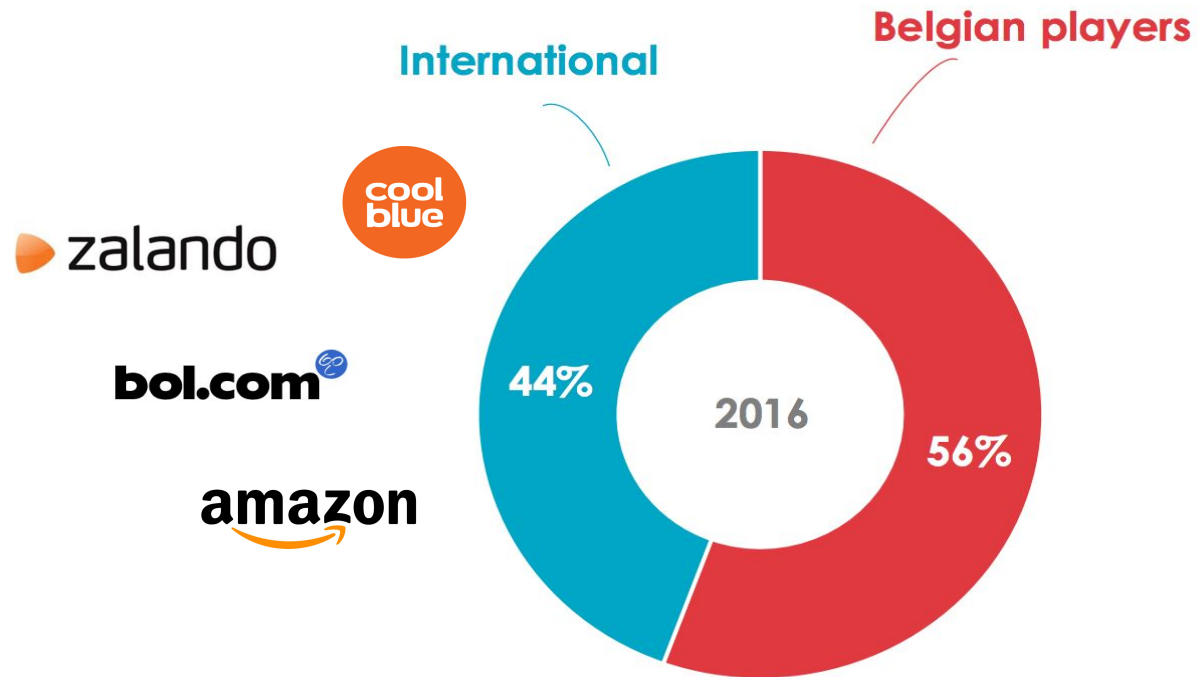
Internet presence of SMEs in Belgium



Advertising spends in Belgium



Ecommerce in Belgium



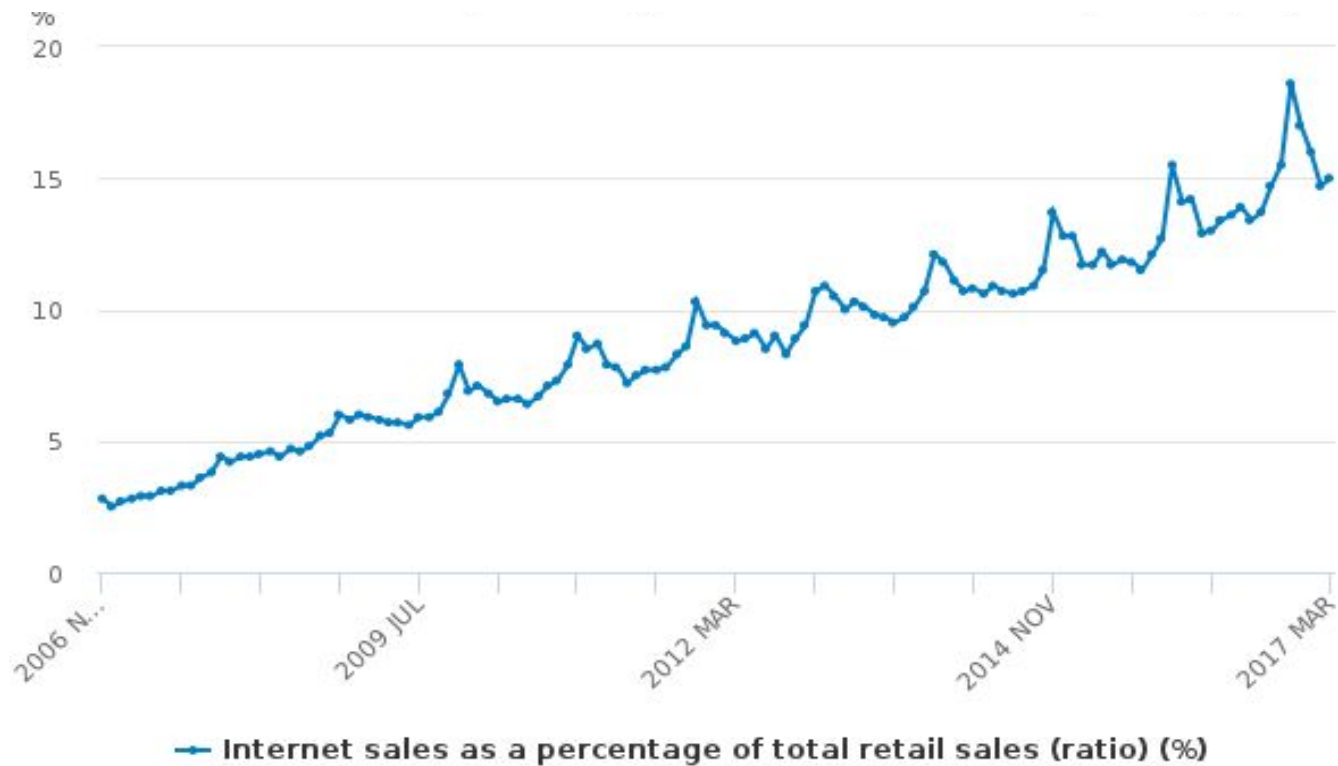
The Zalando case





Impact of digital on the Retail Industry

Ecommerce trend



Source:

Ecommerce vs offline sales

Retail Ecommerce Sales as a Percent of Total Retail Sales in Select Countries, 2015-2020

	2015	2016	2017	2018	2019	2020
China*	15.4%	18.4%	21.8%	25.7%	29.7%	34.1%
UK**	15.0%	16.9%	18.5%	19.9%	21.2%	22.6%
South Korea	11.2%	12.1%	13.0%	13.9%	14.7%	15.3%
Denmark	11.0%	11.6%	12.2%	12.7%	13.1%	13.5%
Finland	10.8%	11.4%	11.8%	12.2%	12.5%	12.9%
Norway	9.8%	10.4%	11.0%	11.5%	12.0%	12.3%
New Zealand	9.0%	9.2%	9.5%	9.7%	9.9%	10.0%
US**	7.3%	8.2%	9.2%	10.2%	11.3%	12.5%
Sweden	7.0%	7.5%	8.0%	8.4%	8.7%	9.1%
Germany	6.7%	7.3%	7.9%	8.5%	8.9%	9.3%
Australia	6.2%	6.7%	7.2%	7.7%	8.3%	8.9%
Japan	6.3%	6.7%	7.0%	7.3%	7.6%	7.8%
Canada	5.8%	6.5%	7.3%	8.1%	9.0%	10.0%
France	5.8%	6.3%	6.8%	7.2%	7.6%	8.1%
Spain	4.9%	5.4%	6.0%	6.5%	7.0%	7.4%
Netherlands	4.9%	5.3%	5.7%	6.0%	6.4%	6.7%
Taiwan	4.5%	4.7%	5.0%	5.2%	5.4%	5.5%
Singapore	4.1%	4.5%	4.9%	5.4%	5.8%	6.2%
Hong Kong	2.9%	3.4%	4.0%	4.6%	5.1%	5.6%
Russia	2.6%	3.0%	3.3%	3.6%	4.0%	4.3%

*Note: includes products or services ordered using the internet via any device, regardless of the method of payment or fulfillment; excludes travel and event tickets; *excludes Hong Kong; **forecast from May 2016*
Source: eMarketer, Aug 2016

213308

www.eMarketer.com

10-20%

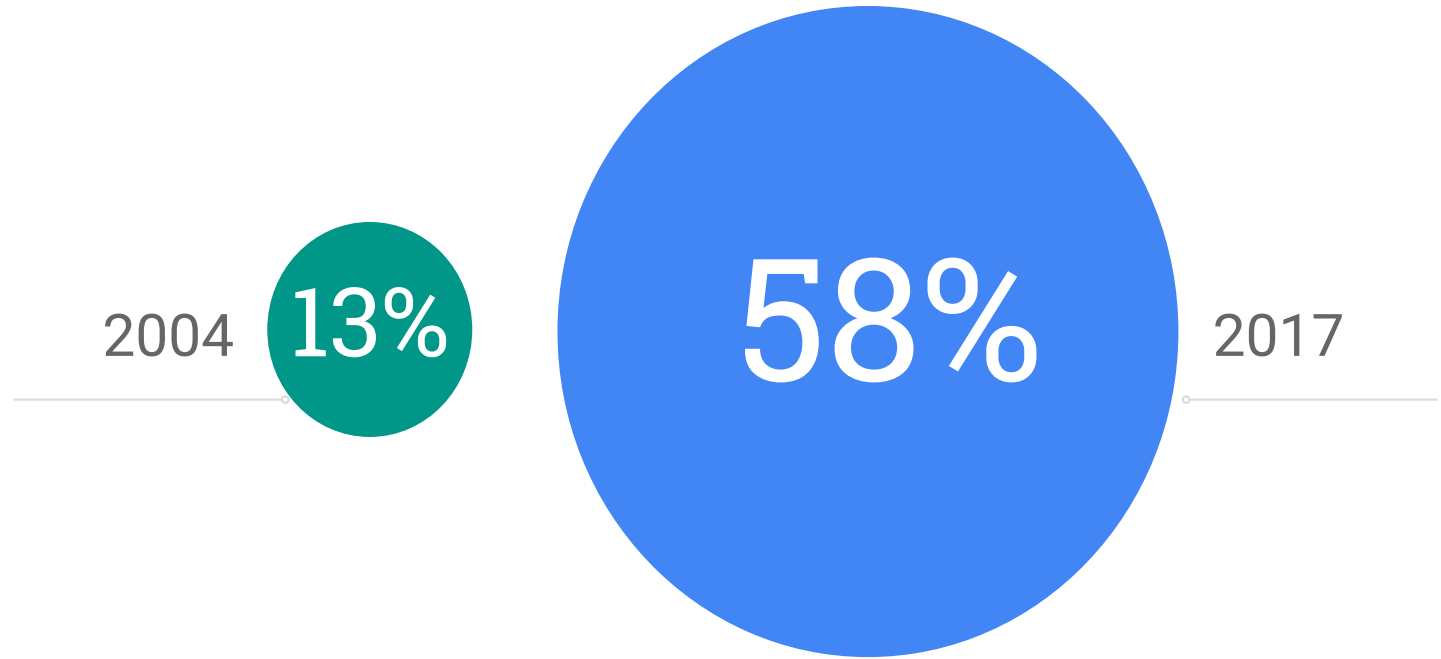
Of retail sales happens via ecommerce

Meaning that..



80-90%

of total retail sales still take place offline

Digital influence on retail sales growing massively



About 75% of shoppers ...

-  research online before making an in-store purchase or vice-versa
-  spend more time preparing for an purchase online than in a store



Searches to find local points of sales increasingly important



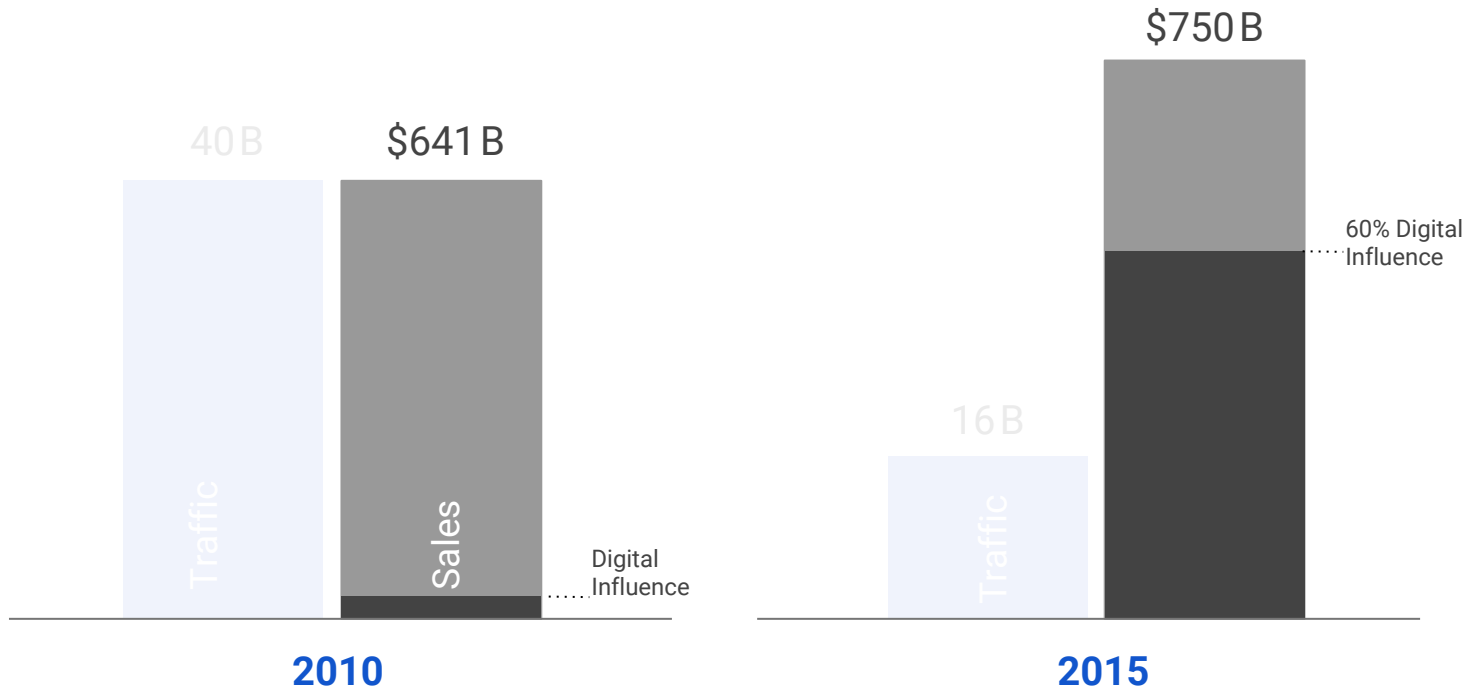
+50%

Growth in local searches

75%

Of consumers who conduct a local search on their smartphone visit a store within 24 hours

Digital acting as growth driver in retail



Source: Deloitte

Digital campaigns boost sales

25%

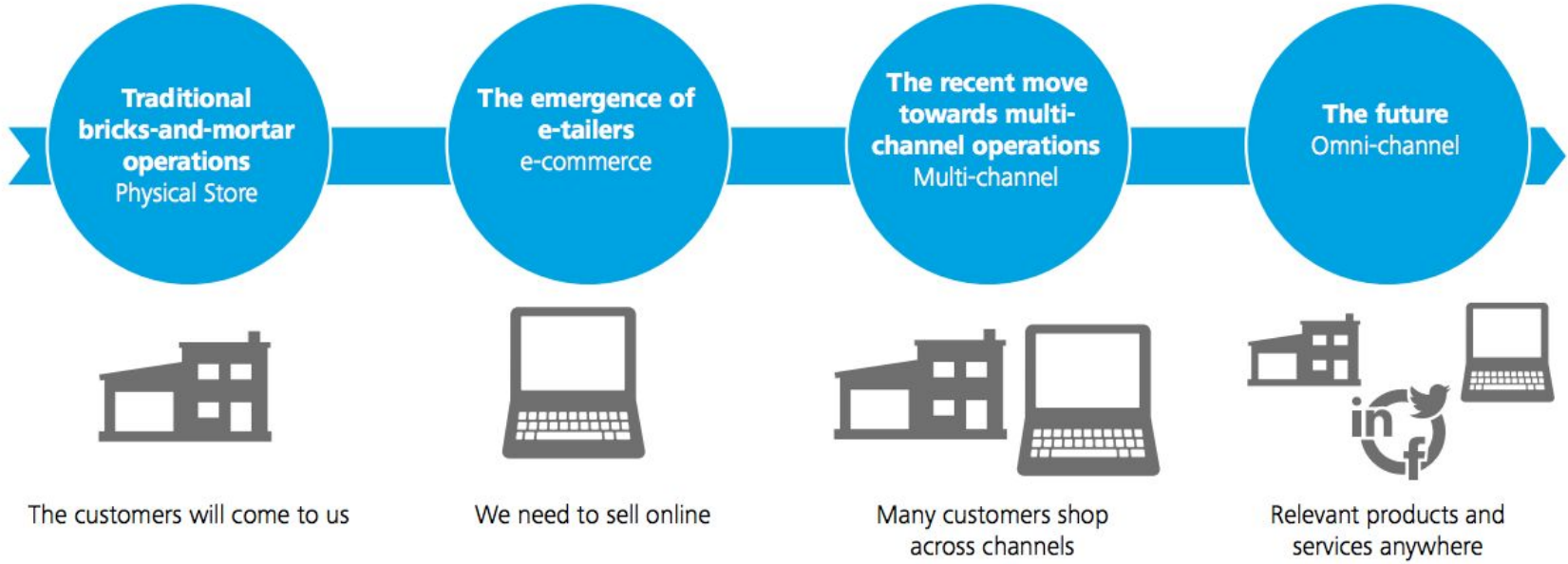
more likely to buy in the store, spending over

10%

More spends on average



Omni-channel is adopted as the new standard model



Grocery players investing in digital



Omnichannel adopted as the new standard model...



amazon.com

Online Companies moving Offline



Offline companies moving Online



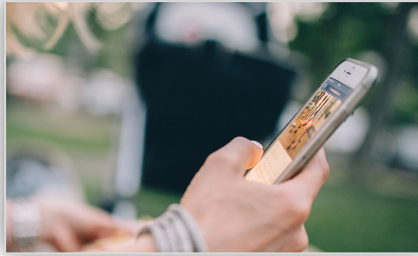
colruyt

DECATHLON



What does it mean to omnichannel proof?

Layers



01
Convenience



02
Personalization



03
Experiences

Enablers



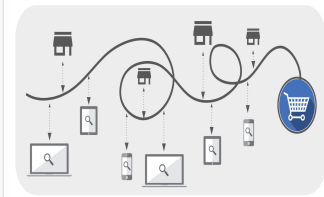
04
Data



05
Partnerships



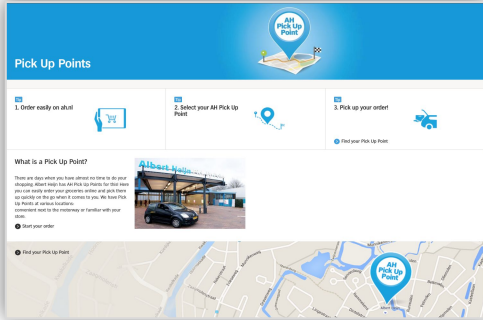
06
Organisation



07
Measurement

Convenience

Click & Collect



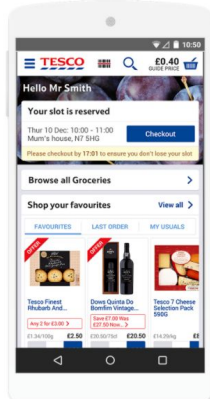
Home Delivery



New store concepts



Apps



Auto-replenishment

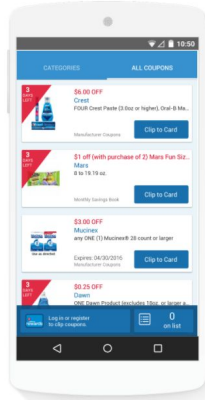


Home apps



Personnalisation

Personal promotions



Content adaptation



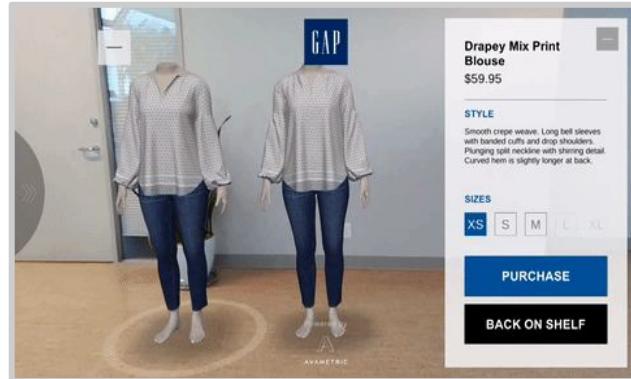
Customization



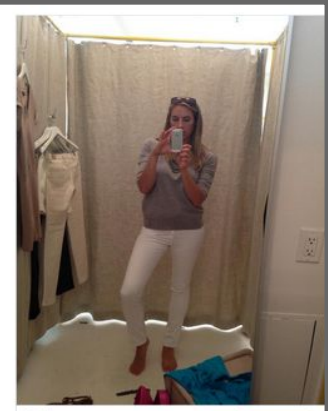
Product recommendations



Online experiences



Online experiences



AshleyParker @AshleyParker [Follow](#)
#foreversummer in white denim @ #katespadesaturdaypopup
8:54 PM - 21 Aug 2013



Automation

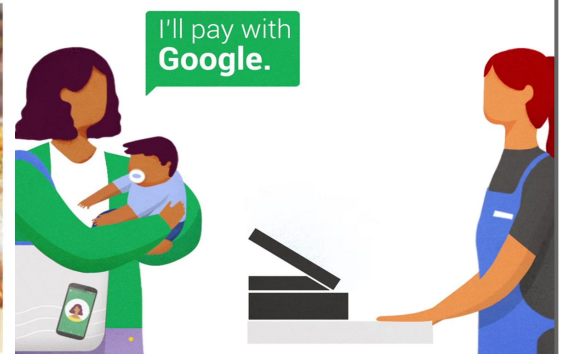


New interfaces & Internet of things

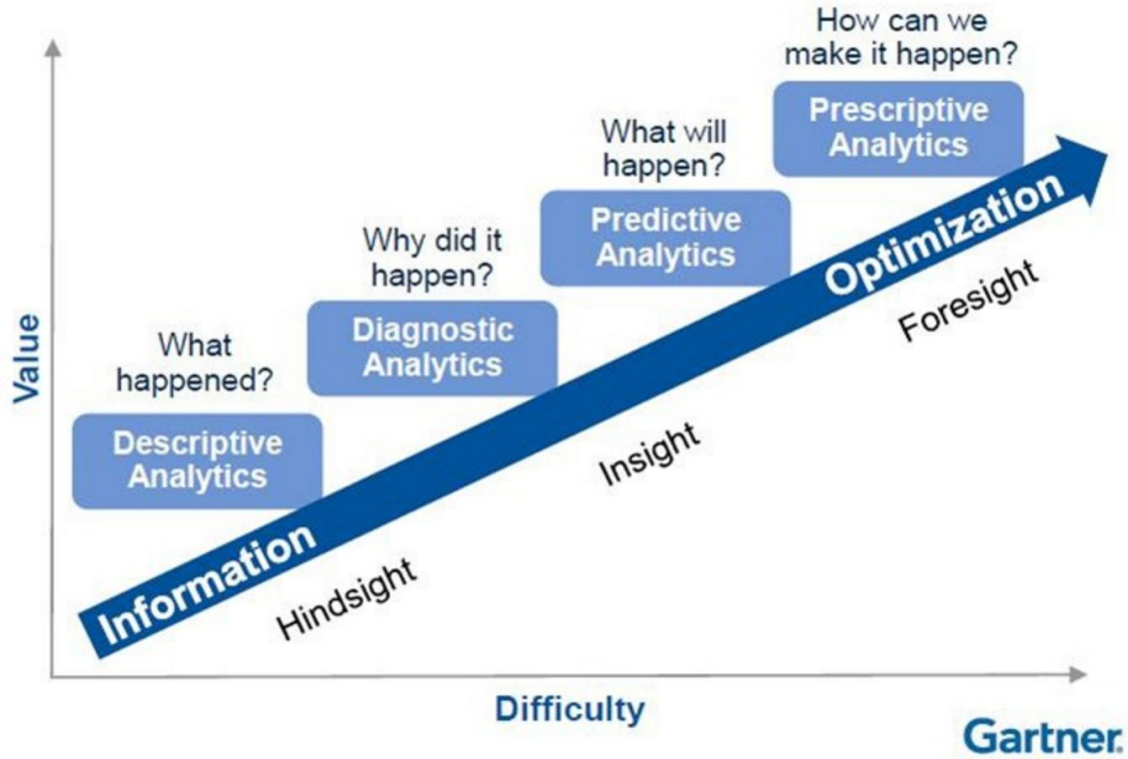


Source: A Guide to the Internet of Things, IDC, Intel, United Nations, 2016.

New payments

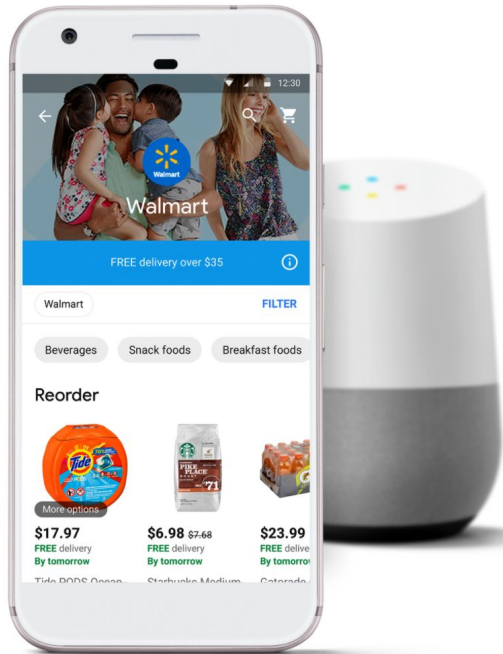


Importance of data

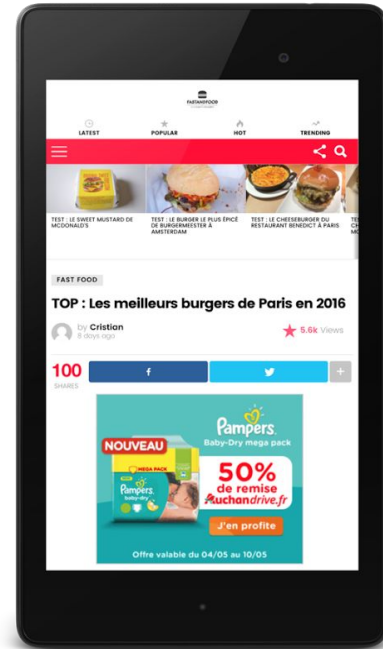


Partnerships

Inclusion in technology



Trade Marketing



Why is omnichannel important?

Cross-Channel Marketing Methods to Be Implemented in 2017 According to Retail Marketers Worldwide

% of respondents

Cross-channel attribution

40%

Test tools for channel and content

38%

Data-fed, consistent view of the customer

35%

Integrated automated offer optimization

33%

Contextual content management

30%

Self-service audience segmentation

28%

Alternative, targeted acquisition

26%

Competitive interaction reporting

17%

Other

4%

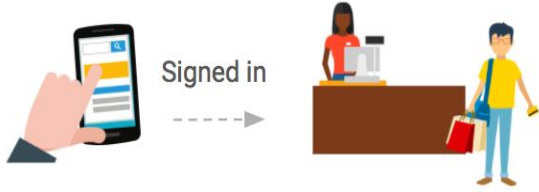
Source: Yes Lifecycle Marketing, "2017 Yes Lifecycle Marketing Channel Report," Jan 19, 2017

222925

www.eMarketer.com

Measure digital influence - Omnichannel

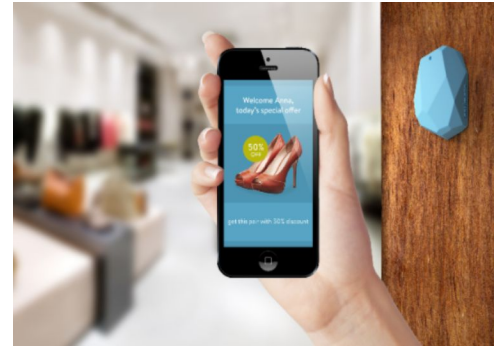
Store Sales Direct



Store Visits



Beacons



Store Sales Direct



A logged-in Google user clicks on a ad

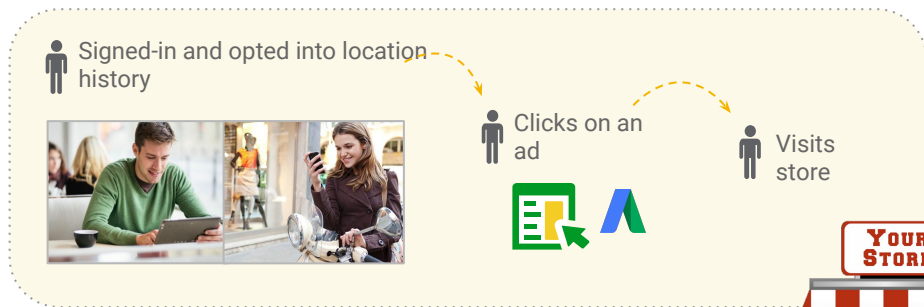
User visits the store and provides email at purchase

Advertiser uploads hashed emails and purchase value

The Solution matches advertiser data with click and report aggregated conversions

Store Visits

User behavior



Backend data

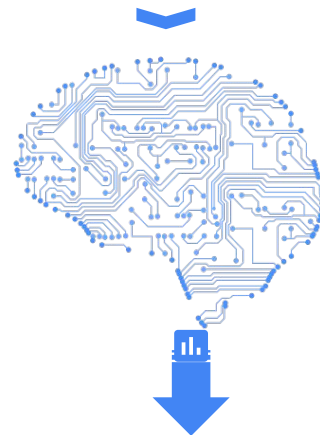


GPS, Wifi triangulation,
Location history



Geometry, Wifi scanning
(200M+ locations)

Ongoing data validation
(surveys) with 5M+ user
panel

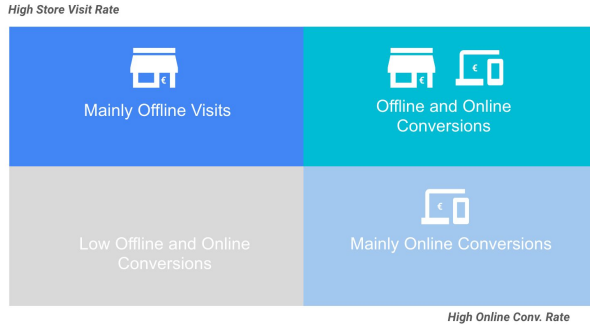


extrapolated to the population
aggregated and anonymized

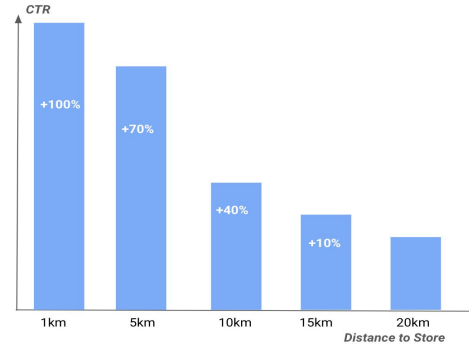


Store Visits: Main insights

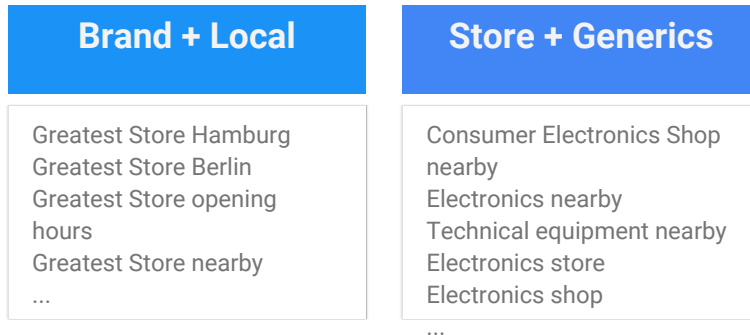
Product segmentation



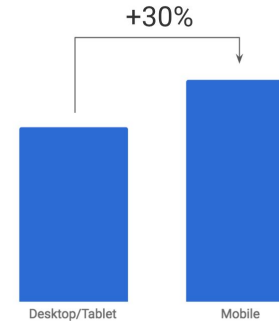
Impact of distance



Performance of campaigns



Role of devices



Beacons





Thank you. Questions?