



Efficient & Responsible A.I.

Finbar Hage, Global Head of Data & Analytics

Rabobank at a glance



Since 1895



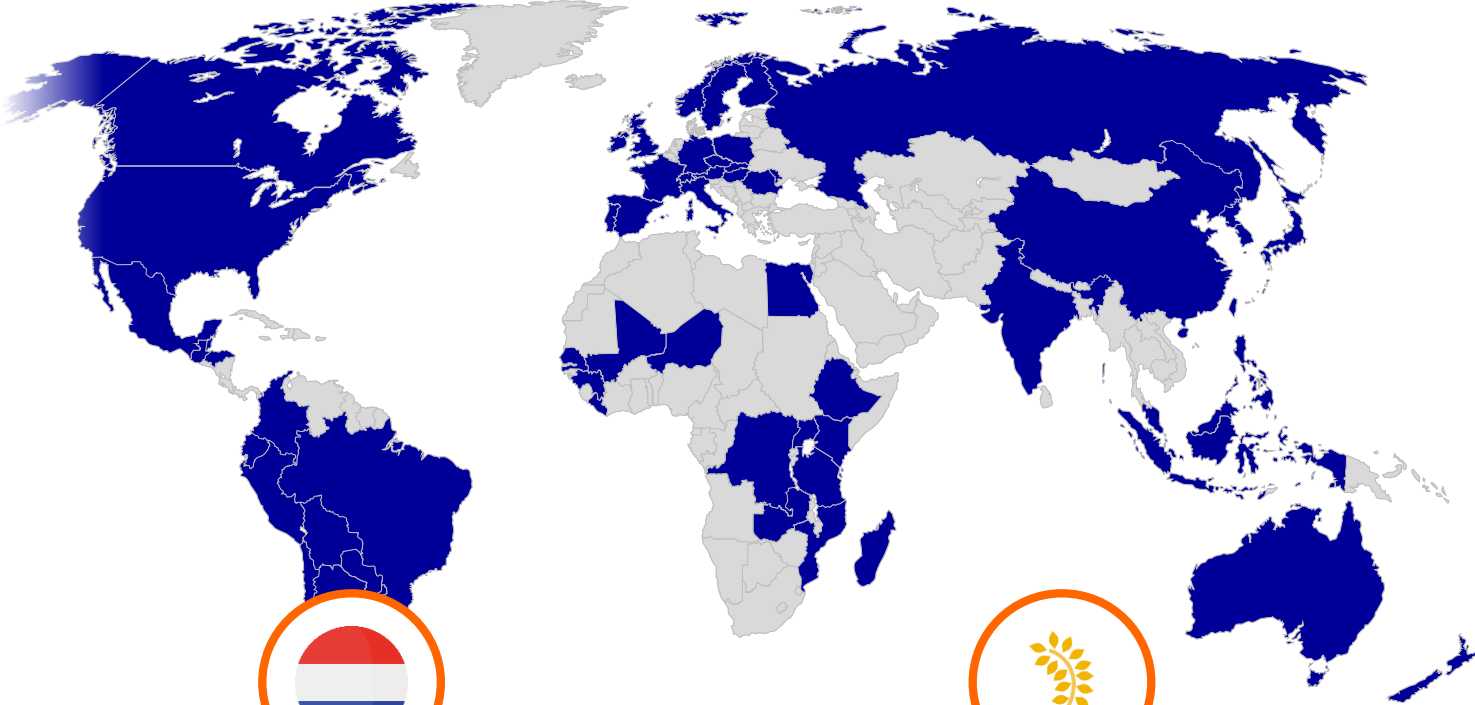
1.9 mln. members



40 countries



9 mln. customers



Banking4Netherlands



Banking4Food





* Image: © Stanley Kubrick. Life and Love on the New York City Subway. Passengers reading in a subway car. 1946. Museum of the City of New York

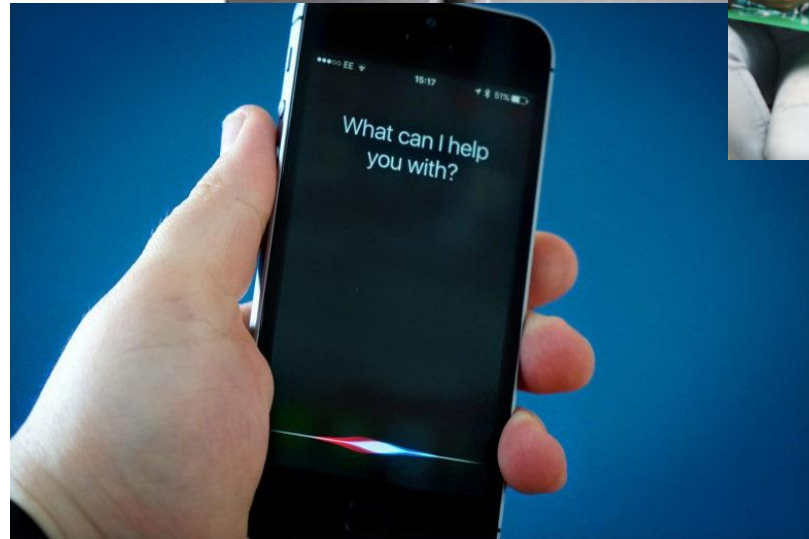


Revolut

Better than your bank account



revolut.com

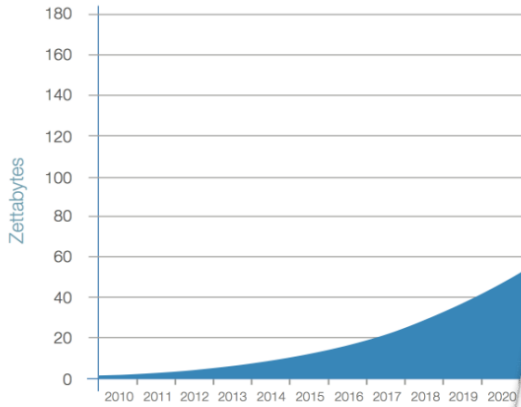




More data

More power

More professionals



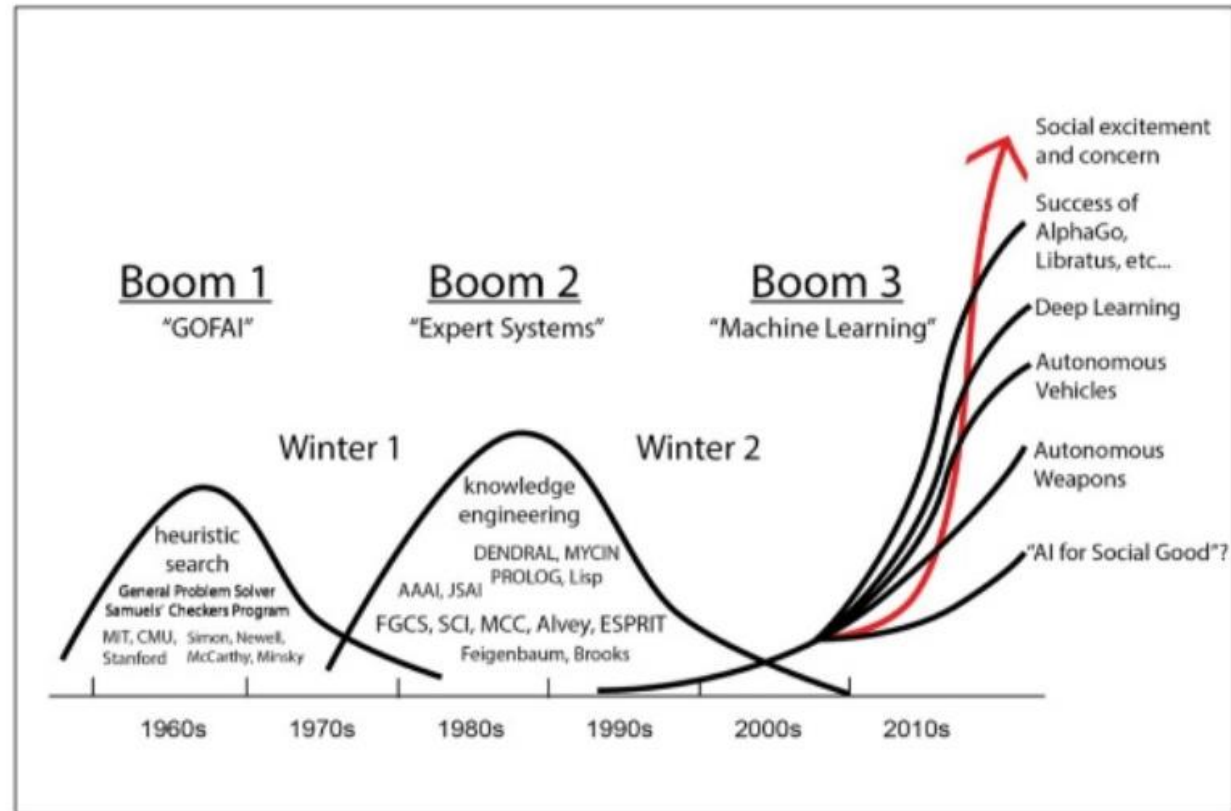
CUMULATIVE HISTORICAL GROWTH IN TRANSISTORS



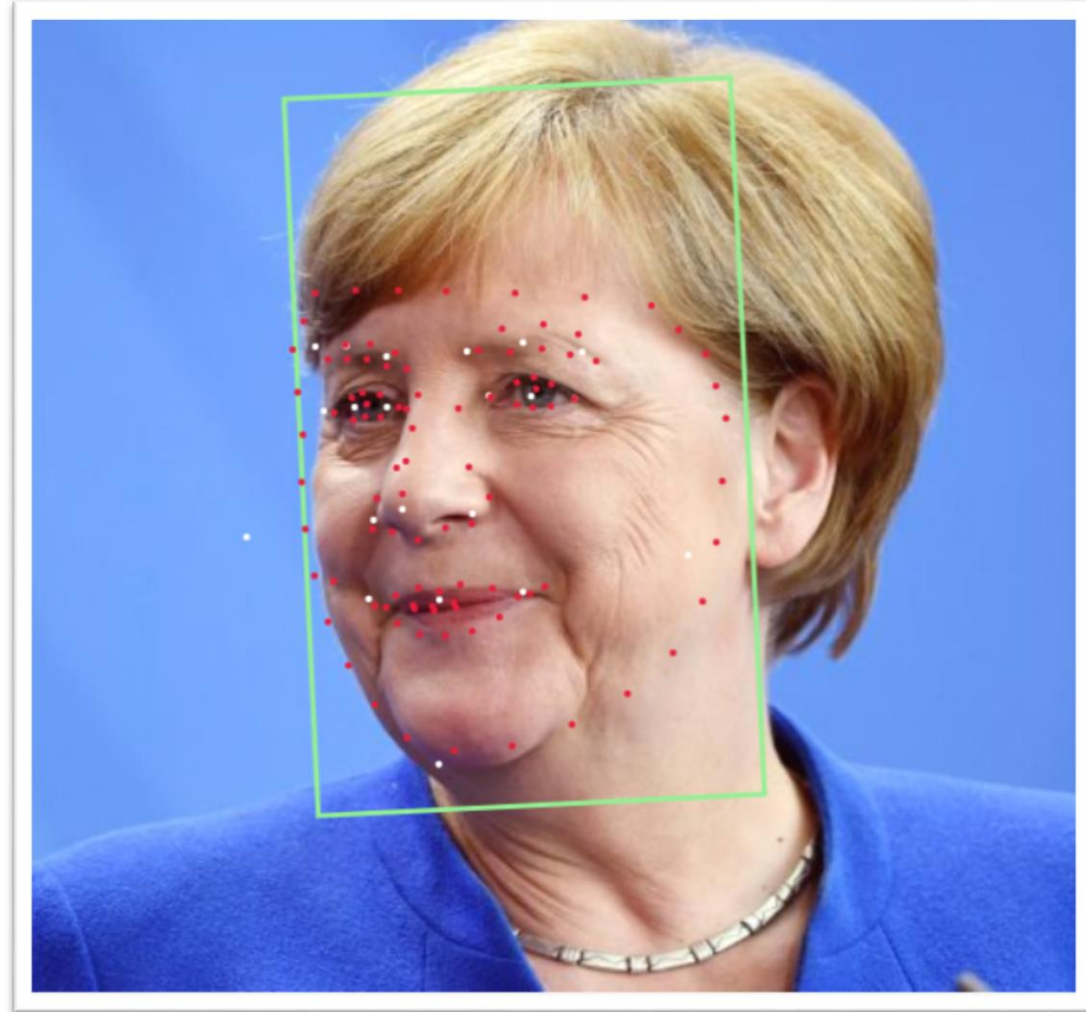
Artificial intelligence (AI), sometimes called **machine intelligence**, is intelligence demonstrated by machines, in contrast to the **natural intelligence** displayed by humans and other animals. In **computer science** AI research is defined as the study of "intelligent agents": any device that perceives its environment and takes actions that maximize its chance of successfully achieving its goals.^[1] Colloquially, the term "artificial intelligence" is applied when a machine mimics "cognitive" functions that humans associate with other human minds, such as "learning" and "problem solving".^[2]


The scope of AI is disputed: as machines become increasingly capable, tasks considered as requiring "intelligence" are often removed from the definition, a phenomenon known as the **AI effect**, leading to the quip, "AI is whatever hasn't been done yet."^[3] For instance, **optical character recognition** is frequently excluded from "artificial intelligence", having become a routine technology.^[4] Capabilities generally classified as AI as of 2017 include successfully understanding human speech,^[5] competing at the highest level in strategic game systems (such as chess and Go),^[6] autonomous cars, intelligent routing in content delivery network and military simulations.

Source: Wikipedia







Face	Position	Classifiers and measurements
	<p>384.1, 202.8 2.76 deg 187 x 243 score: 1</p>	<p>5oclock shadow : no (89%), age : 42 (60%), arched eyebrows : no, attractive : no (88%), bags under eyes : yes (62%), bald : no (71%), bangs : yes (69%), beard : no, big lips : no (89%), big nose : no (14%), black hair : no, blond hair : yes (37%), blurry : yes (27%), brown hair : yes (4%), bushy eyebrows : no (86%), chubby : no (27%), double chin : no (36%), expression : neutral (33%), gender : male (22%), glasses : no, goatee : no, gray hair : yes (24%), heavy makeup : no, high cheekbones : no (14%), mouth open : no (86%), mustache : no, narrow eyes : yes (11%), oval face : no (5%), pale skin : no (19%), pitch : -7.44, pointy nose : no, race : white, receding hairline : no (72%), rosy cheeks : no, sideburns : no, straight hair : yes (41%), wavy hair : no (54%), wearing earrings : no (77%), wearing hat : no (81%), wearing lipstick : no, wearing necklace : no (54%), wearing necktie : no (23%), yaw : 31.07, young : no (56%)</p>





I'm eating pizza with olives

I'm eating pizza with friends

Let's eat grandma!



Let's eat, grandma!

Stolen painting found by tree

The Pope's baby steps on gays

Scientists study whales from space

Actor sent to jail for not finishing sentence

Boy paralyzed after tumor fights back to gain black belt

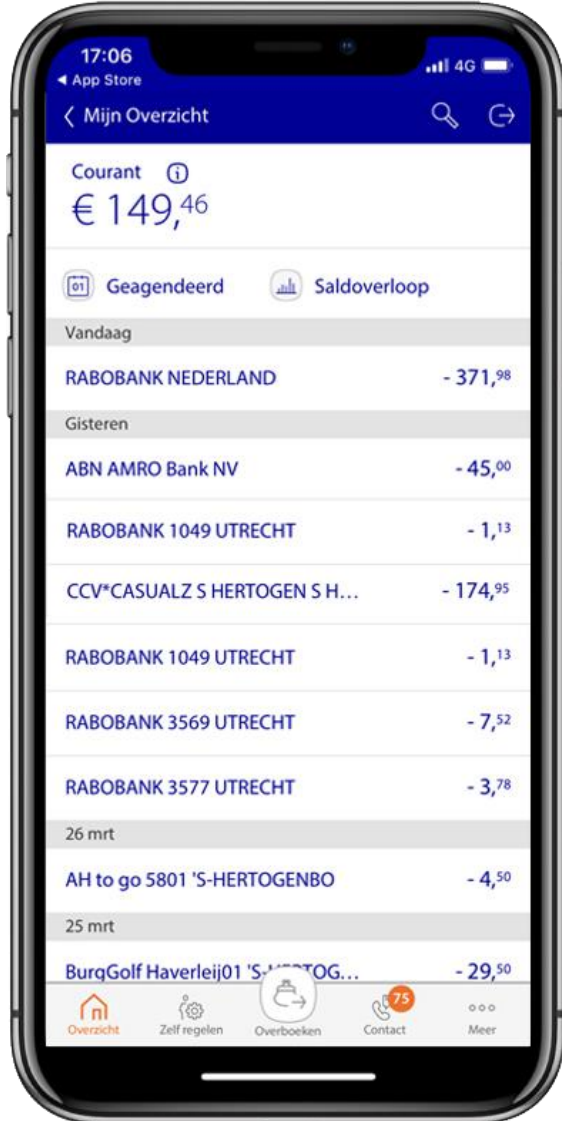


Select all squares with street signs.

Report a problem

Verify





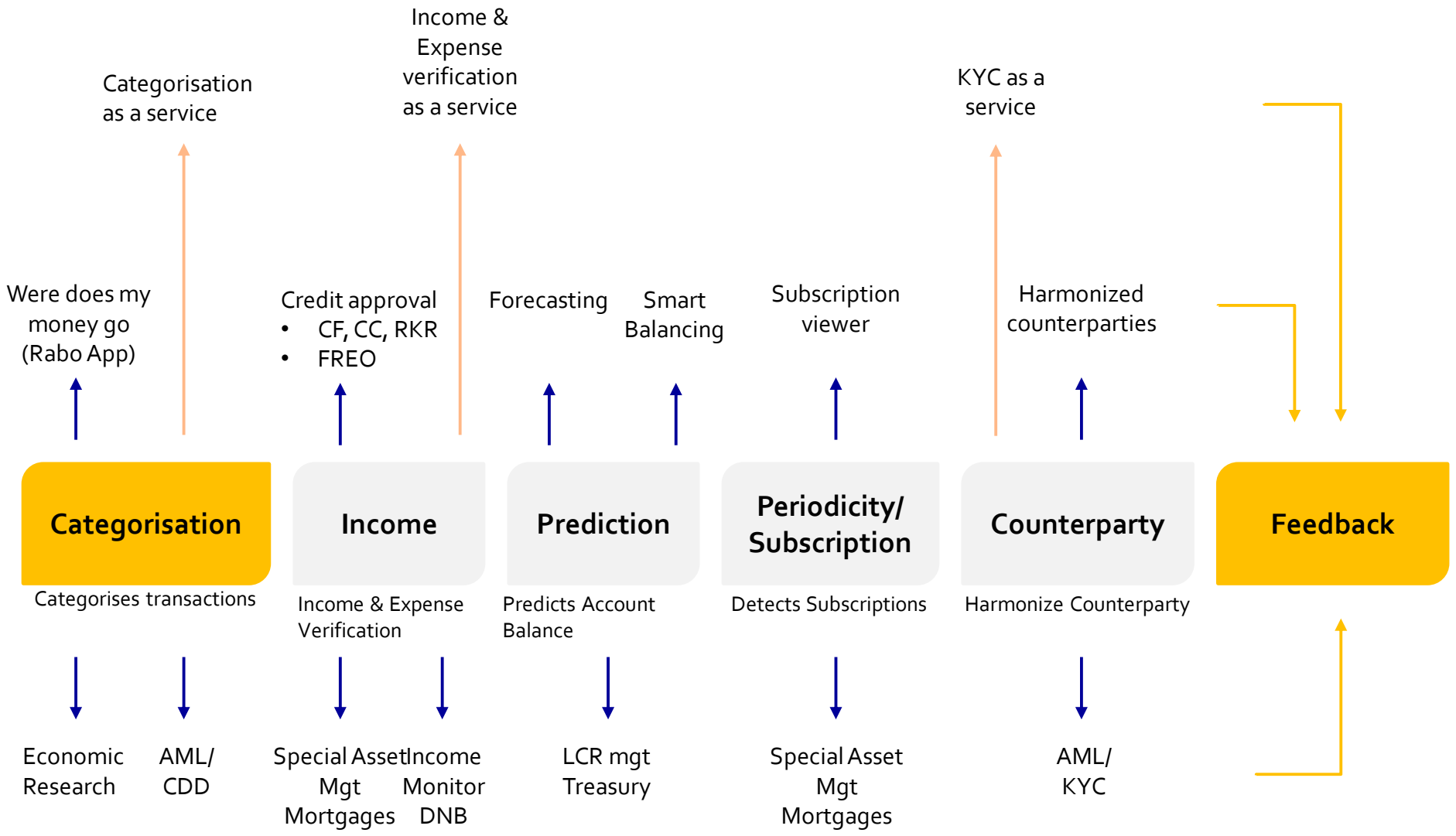
RATE

Open banking

Rabobank Channels

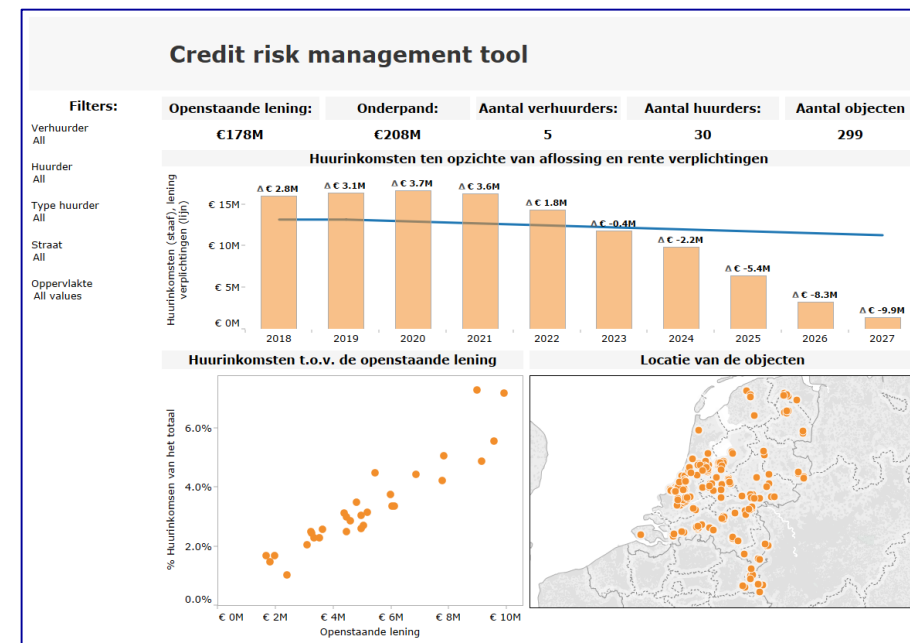
Machine Learning Services

Internal use



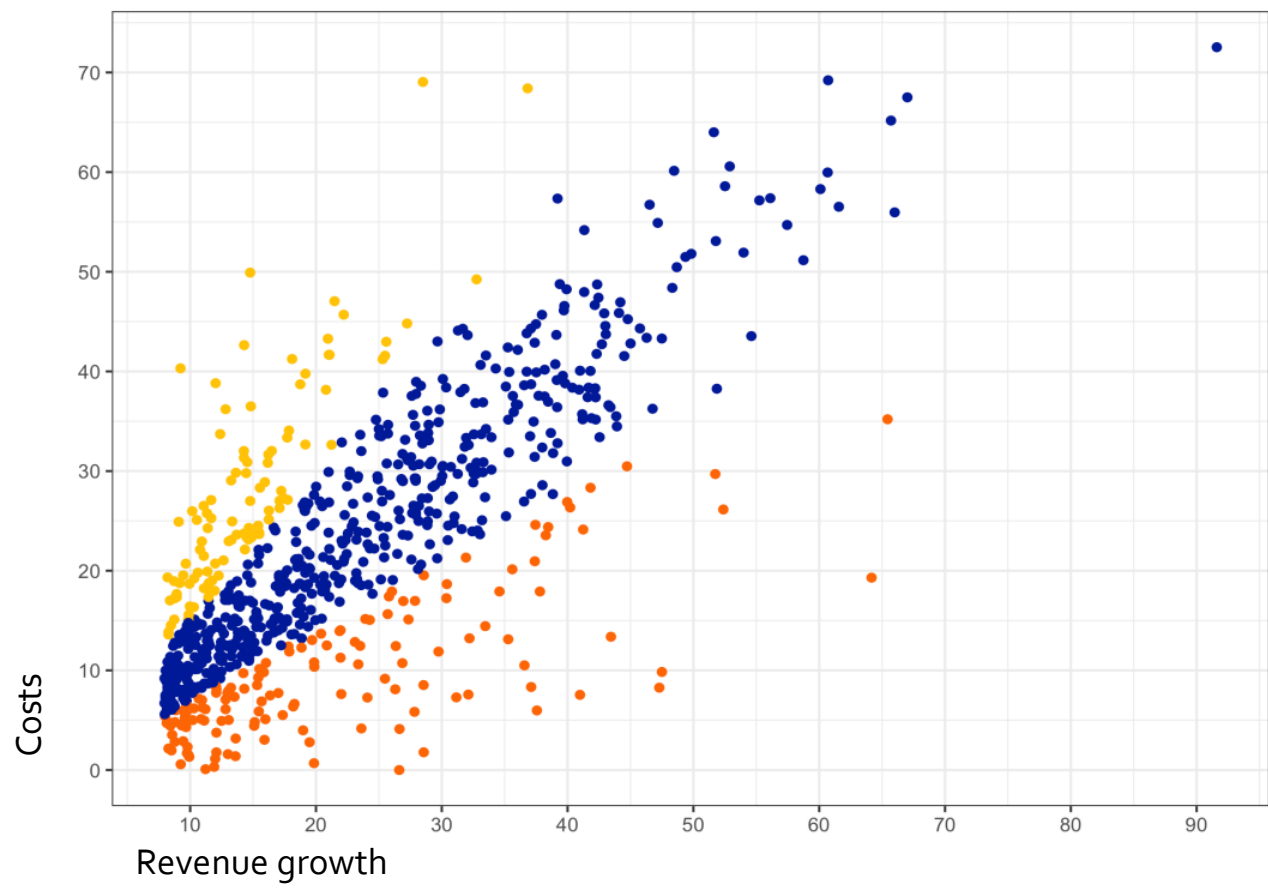


	A	B	C	D	E	F
1	Voornaam	Achternaam	Adres	Postcode	Plaats	Groep
2	Jan	Smits	Hoofdstraat 23	4568 DL	Sappemeer	Familie
3	Gerda	Smits	Hoofdstraat 132	4568 DM	Sappemeer	Familie
4	Bob	Veenstra	Kapiteinsstraat 39	5185 IE	Zwolle	Vrienden
5	J.R.	Janssens	Lindelaan 10c	3845 AF	Stadskanaal	Buren
6	Wim	van der Landen	Torenpad 348	3920 CC	Hoogeveen	Collega's
7	Dick	Verhees	Marterweg 210	3922 CL	Hoogeveen	Collega's
8	Mevr.	de Haan	Parallelweg 129	3921 CC	Hoogeveen	Familie
9	Mirjam	van Traa	Pietershof 59	4569 IF	Sappemeer	Collega's
10	Paul en Ria	Mosterdman	J. Smutsstraat 2	5189 DR	Zwolle	Vrienden
11	I.	Smits	Vlaamse gas 109	5186 PE	Zwolle	Familie
12	D.J.	de Haan	Otterpad 9a	3922 CA	Zwolle	Familie
13	Dorien	de Jonge	Hoveniershof 11	5188 HH	Zwolle	Vrienden
14	Fam.	van Beek	Lindelaan 12c	3845 AF	Stadskanaal	Buren





Sterke groeiers naar locatie





← Agri-wallet



Olivia Mayakiso

Phonenumber
011 254 2 475 897

Gender
Female

Group name
Riwruok e teko

Group member/leader
Member

Crop types

Transactions Satellite Map

Total saved
546 KSh

Total spent
272 KSh

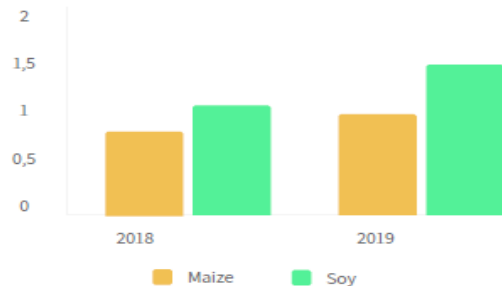
Loan approved on
12-04-2019

Repayment



Order quantity (Acres)

Time period



Amount spent over time (KSh)

Time period



SurePay – Fintech of Rabobank

Pioneer in Confirmation of Payee

CoP requests processed:

+ 1,700,000,000

Implemented across:

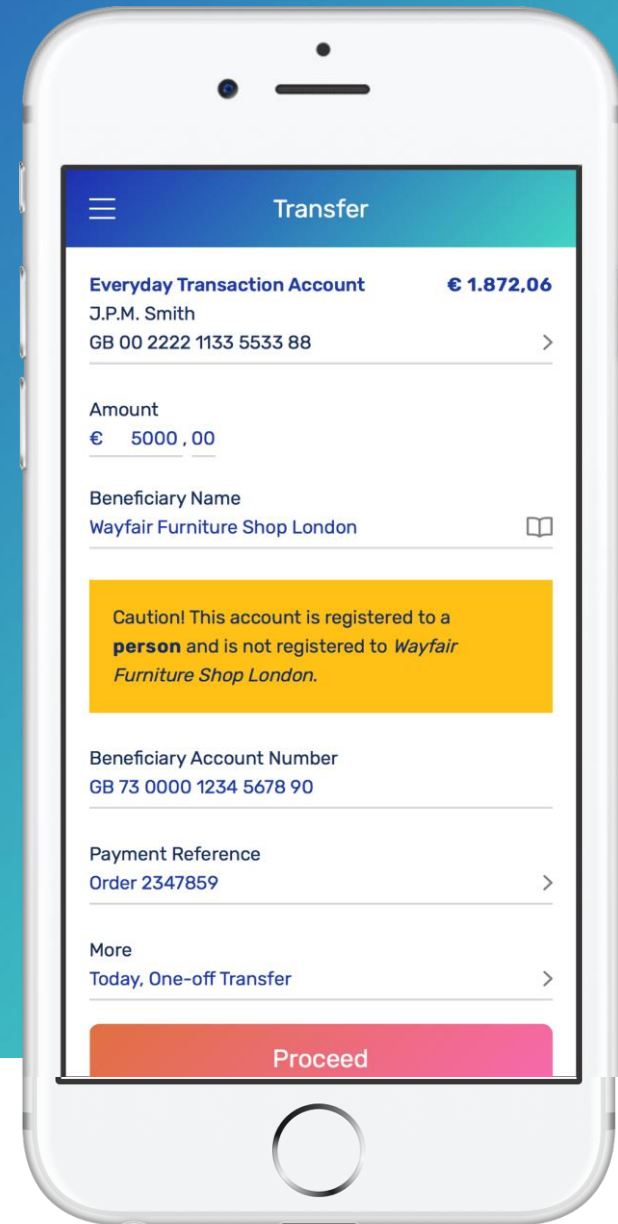
+ 10 major banks

Direct corporate access



↓ 72%
drop in reported
APP Fraud/scams

↓ 55%
drop in misdirected
Payments



surepay
a Rabobank company

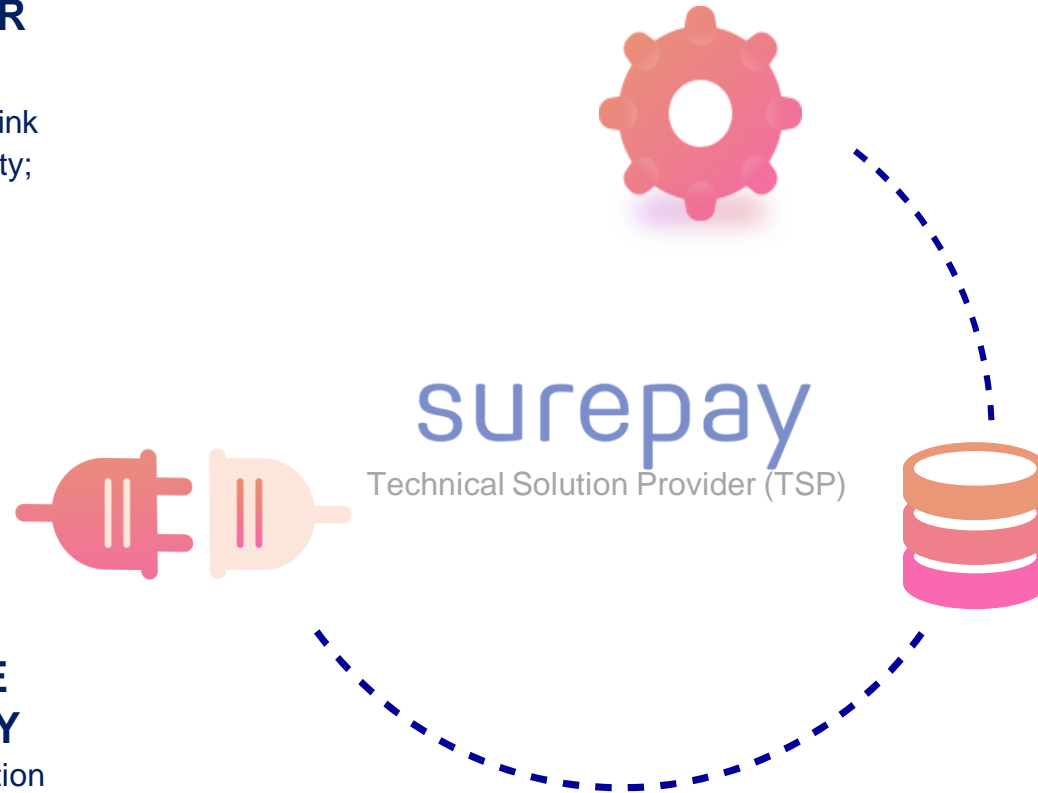


NO IMPACT ON CUSTOMER EXPERIENCE

With a CoP response faster than the blink of an eye and proven 99.5%+ availability; SurePay ensures that performance is second to none

SOFTWARE AS A SERVICE ACCESS & API CAPABILITY

Enables the exchange of CoP information between ASPSPs and SurePay to PISP's and further across the banking industry.



MATCHING CAPABILITY

Fast and intelligent, rule-based algorithm with built-in matching logic to ensure matching excellence.

DATA MANAGEMENT CAPABILITY

Allows for various (simultaneous) ways of making ASPSP (account) data available for CoP from a variety of data sources and databases, in different manners.



Wells Fargo accidentally foreclosed on hundreds of homeowners

PUBLISHED TUE, AUG 7 2018 12:14 PM EDT



Nearly 400 Wells Fargo customers lost their homes when they were accidentally foreclosed on after a software glitch denied them the ability to modify their mortgages as they sought federal aid, the bank disclosed in a regulatory filing late Friday.

During the course of an internal review, we determined that an automated calculation error may have affected the decision on whether or not to offer or approve some mortgage modifications...

Tom Goyda, senior vice president of Wells Fargo said in a statement. "We're very sorry that this error occurred and are providing remediation to the approximately 625 customers who may have been impacted."



Amazon ditched AI recruiting tool that favored men



Reuters
Thu 11 Oct 2018 00:42 BST



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.. Amazon's machine-learning specialists uncovered a big problem: their new recruiting engine did not like women.

The team had been building computer programs since 2014 to review job applicants' résumés, with the aim of mechanizing the search for top talent, five people familiar with the effort told Reuters.

But by 2015, the company realized its new system was not rating candidates for software developer jobs and other technical posts in a gender-neutral way. That is because Amazon's computer models were trained to vet applicants by observing patterns in résumés submitted to the company over a 10-year period. Most came from men,

SAMSUNG



Fairness and bias



Reliability



Privacy & Security



Transparency



Accountability



Our customer 'owns' the data

We use data to benefit the customer

Data at Rabobank is 100% transparent

The customer is in control

Privacy & security by design



Rabobank



Data



Model



Usage





Fairness & bias

Reliability

Privacy & security

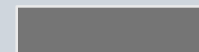
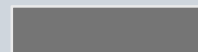
Transparency

Accountability



Bias

Volume



Rule Based

Predictive

Neural networks



Informing

Advising

Deciding

