

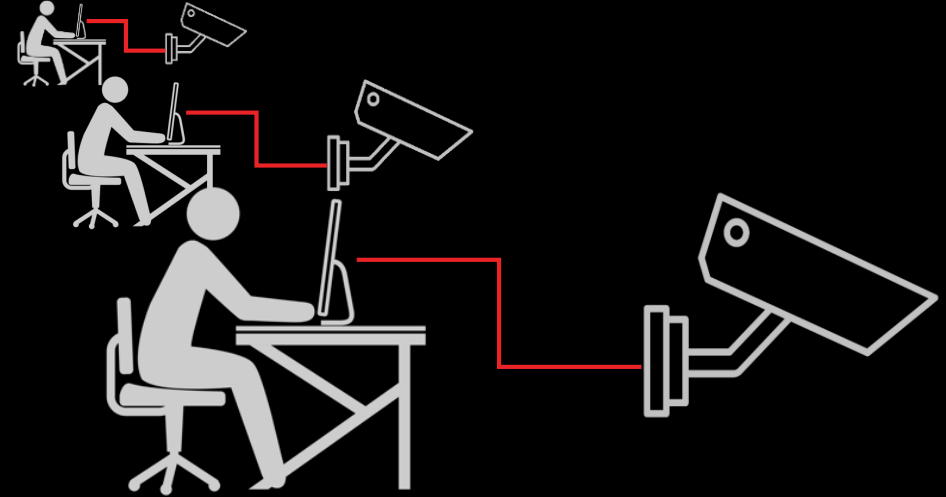


Edge AI specialists

Human-AI teaming in the Real World

Imagine if **every** one of your **remote systems** had a **dedicated operative in the real World.**

Constantly **vigilant**, always **contactable**, and **flexible** enough to be retrained at a moments notice.



Using **Distributed Artificial Intelligence**

can deliver this capacity

ARCHANGEL IMAGING [AI]



"AI eyes for land, sea and sky"

- Imaging hardware/software specialists focusing on "Edge" Artificial Intelligence (AI) applied to computer vision
- Archangel Imaging spun out from Archangel Aerospace >> ultra-long endurance unmanned aircraft specialist.
- Advanced tech in the Oxford ecosystem
- Government and private sector supported
- BT Infinity Award Winner 2018 (Augmented Intelligence)



Credit: Airbus D&S

COMMERCIAL IN CONFIDENCE

PROBLEMS AT THE EDGE



- Machine Learning applied to computer vision brings tremendous value to many industries
 - but most solutions are **cloud** based, i.e. centralised.
- This leads to unsolved problems on “the edge” i.e. in remote or field locations



Offshore Platforms



Worker Safety



Unmanned Systems



Crisis Areas



Space Applications



Pipeline Security



Border Security



Camouflage Detection



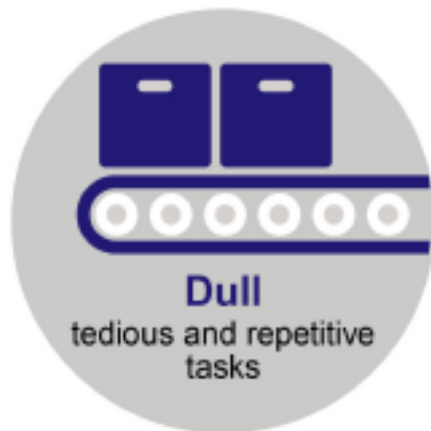
Ad-hoc deployment



Complex Logistics

COMMERCIAL IN CONFIDENCE

WHY “EDGE AI”



Credit: UK Research and Innovation

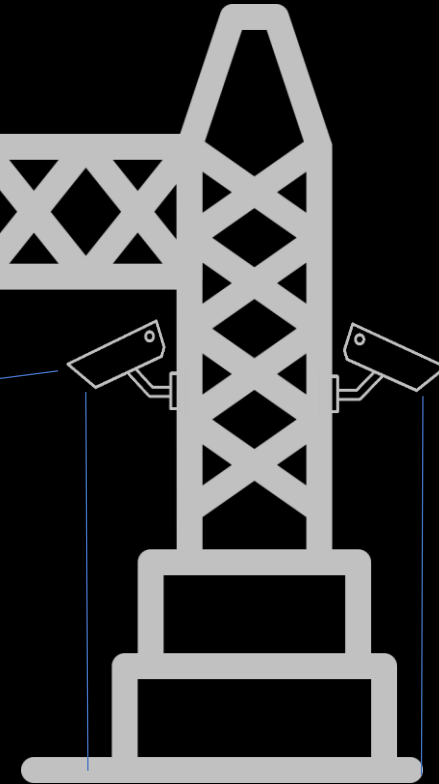
Case Studies

USE CASE | HEALTH AND SAFETY COMPLIANCE



WHERE: Factories, Construction Sites, Depots, Train Tracks, Mining Sites, etc

WHY: Health and Safety is **critical** for both an employee wellbeing and **insurance & regulation**.



Identify **breaches in H&S** regulation and policy, and **specify areas** where PPE is required.

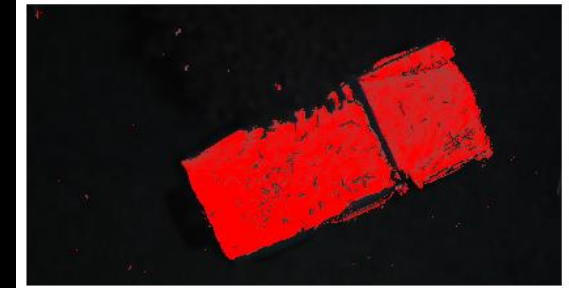
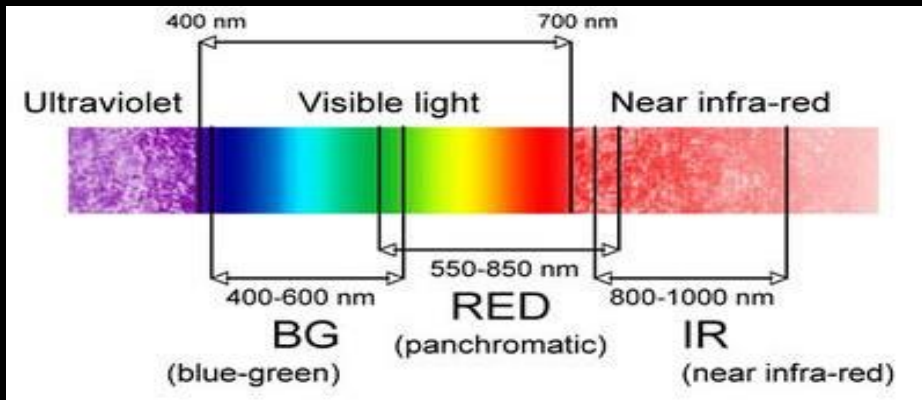
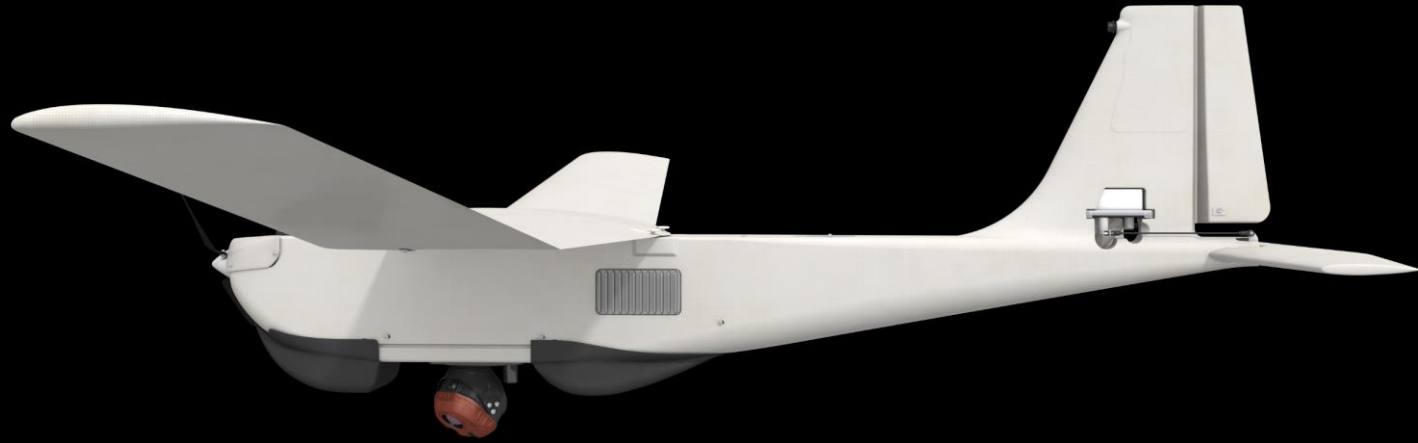
Create **proximity alerts** to prevent workplace accidents and **stop machinery**.

Create **daily reports** with associated images, or stream live video throughout the day.

APPLICATIONS - BLOS Hyperspectral



- Small RPAS limited by data link and manual FMV analysis
- Enable BLOS (low rate) real time detection by fitting AI payload



WAMCam – Wildlife Protection / anti-poaching



Jungle deployment with Oxford University team 2018

**Prototype edge AI camera-trap and LoRaWAN
comms to Satellite gateway**

Common interface for AI and human staff

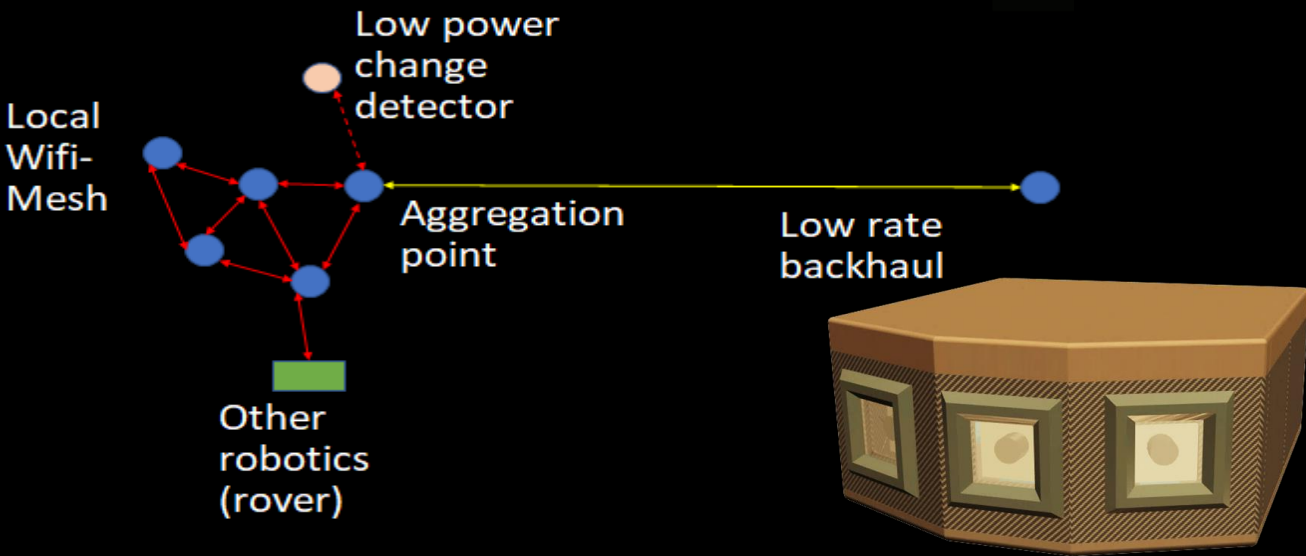
Satellite gateway under rainforest canopy

Progression to anti-poaching patrol 2019/2020



COMMERCIAL IN CONFIDENCE

WatchChainR – Oil Pipeline Protection



ARCHANGEL IMAGING

DEVICES MISSIONS TRIGGERS ACTIONS TEST DEPLOY

Device List

Add Device

Device ID	Name	Lat	Lon	Status	Status Update	Location Update	Edit	History	Remove	Device Info History
TC0001	Tawau/Air panas 1	4.4115958	117.8944	Trap Closed	2018-06-24 10:44:15	2018-03-09 12:45:11				View
TC0002	Tawau/Bombalai 1	4.405012	117.897968	Trap Closed	2018-06-24 10:44:15	2018-03-09 08:08:51				View
TC0003	Tawau/Bombalai 2	4.406151	117.8946	Trap Open	2010-02-06 19:30:13	2018-03-09 04:55:01				View
TC2000	Tawau/Canopy 4	4.409	117.89448	Trap Open	2018-07-25 17:35:28	2018-07-25 17:35:28				View

* To see the latest status click on Device ID

Devices Location

Map Satellite

Source: Alaska Department of Natural Resources

Satellite link for high-priority data

Scout drone for safe short range survey

Autonomous path planning, obstacle avoidance and recovery

Robot downloads camera data on local network

Day / night operation

COMMERCIAL IN CONFIDENCE

Robot deploys drone for hard-to-reach spots

Source: BP

LIDAR

Mobile camera survey all-around

Come by for a chat



Problems we can help solve for you:

- Warehouse safety
- Human-machine cooperation
- Remote infrastructure
- Robotic logistics
- Automated inspection
- The other thing.....

Problems you can help solve for others:

- Wildlife protection
- Anti-slavery / people smuggling
- Overseas development
- Pollution
- Illegal forestry and mining

Hello

Hindsight is a wonderful thing



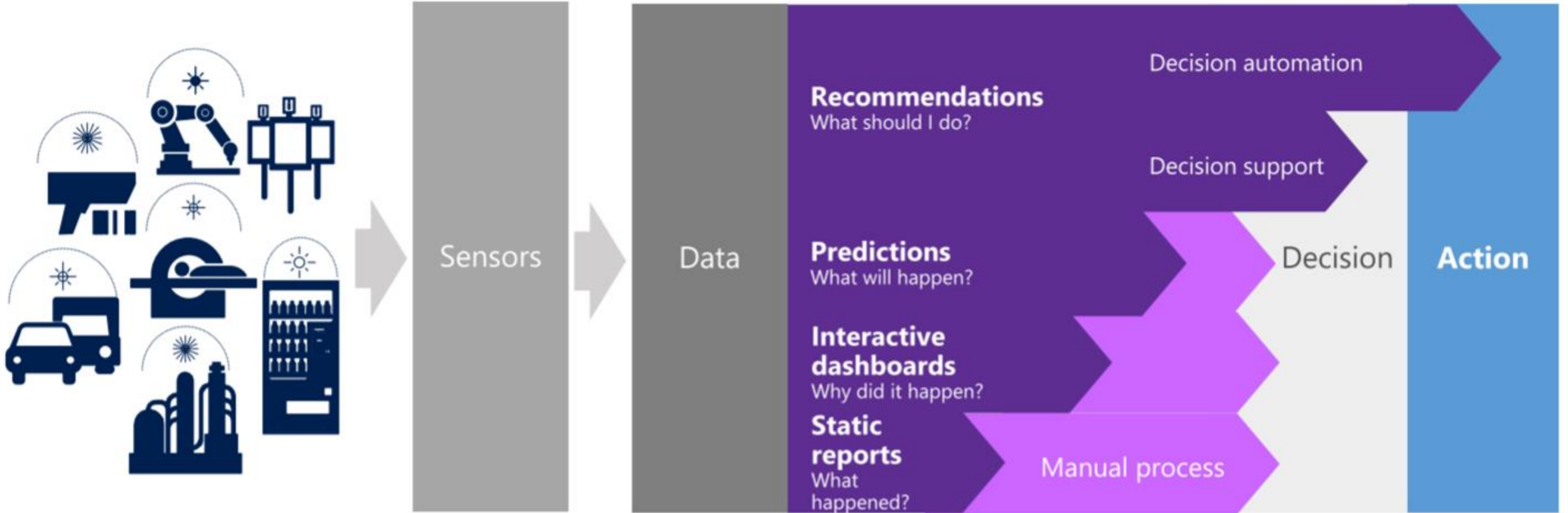
InformedActions is a **PropTech solution**, with machine learning at its core, that uses systems data to enable our clients to manage their assets better and provide enhanced services to their customers.

This data is further enriched when augmented with additional data sets such as Internet of Things (IoT), weather, traffic and socio-economic data.

This enables us to predict and pre-empt when problems are likely to occur inc: Boiler failure, fridge failure, fuel poverty, damp and mould, security concerns, lack of rent payment, tenancy churn & potentially many other issues.



Assets to Decisions and Actions



Ambulance Optimisation

Predictive Analytics

Problem:

- Client under efficiency and service level pressures.
- The private ambulance company operate from 45 bases throughout South Africa with 8 branches and 17 sub-branches in the coastal belt
- They suspected their operation was sub-optimal especially considering their HR cost represented about 70% of their total expenditure

Solution:

- Our data analytics solution provides high accuracy predictions of where, when and what type of emergency calls will take place.
- Predictions are translated into a optimised rosters that prescribe where, when and what number of paramedics and ambulances are required.

Result:

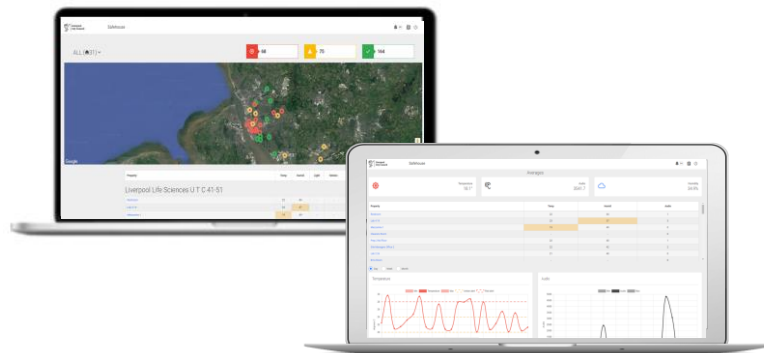
- 7% decrease in salaries, 11% decrease in overtime costs and 16% reduction of contractors expenses while increasing revenues by approximately 7%.





Assisted Living Remote Monitoring

A smart social housing solution to cut cost of maintaining housing, improve living conditions and health and social care provision.



- The service integrates remote monitoring, data management, data analytics and improvement identification.
- It will help make it easier for people to live independently for longer and make it possible to discharge people earlier from hospital. It will reduce the cost of providing housing and increase the life of the housing stock.
- Includes a LoRa network across Liverpool
- 2,000 homes with 'Safehouse' devices which incorporates four sensors; temperature, sound, humidity and motion.
- Built for scale on the Microsoft Azure Cloud
- Key Benefits Include:
 - Movement - Identify a lack of movement, or movement within a 'expected to be empty property'
 - Early detection of damp and mould problems
 - Fuel Poverty issues - External vs Internal Temp
 - Detect Alarms early - (Sound)
 - Power outages



Predictive Analytics Preemptive Maintenance

A smart social housing solution to predict when and where events are likely to occur to preemptively allocate resources.

- Who: Housing organisation in North West of England across 7,000 properties
- Challenges:
 - Predicting void properties based on tenant data and customer demographics
 - Predicting boiler repairs based on historical repair data and boiler make, model, age
- Solution:
 - Demographic void predictions- predicting tenancy churn per demographics. E.g

Marital Status	Universal Credit	Tenure Type	Housing Benefit	Age	Postcode	Estimated Tenancy Length (Months)	Number Of Expected Terminations	Number Of Tenants
Single	False	Affordable Rent	False	40-60	WA8	17.23	22.21	64

- Providing weekly/monthly boiler predictions
- Benefits:
 - Ability to predict number of boiler problems each month
 - Ability to predict number of tenancies ending each month



Predictive Analytics Preemptive Maintenance

Providing predictive analytics and anomaly detection for a large retail chain.

- Predicting Calculated Product Temperature (CPT) alarms for in store fridges.
- Predicting work orders and resource requirement based on Alarm predictions.
- Using Anomaly detection to preempt when alarms are likely to occur based on significant fluctuation in temperature
- Results:
 - The anomaly detection algorithm successfully recognises behaviour indicative of alarms before they were raised in many cases. The algorithm recognises abnormal behaviour two to three days before the alarm was raised, demonstrating significant early warning benefit.

Thank You

Hindsight is a wonderful thing



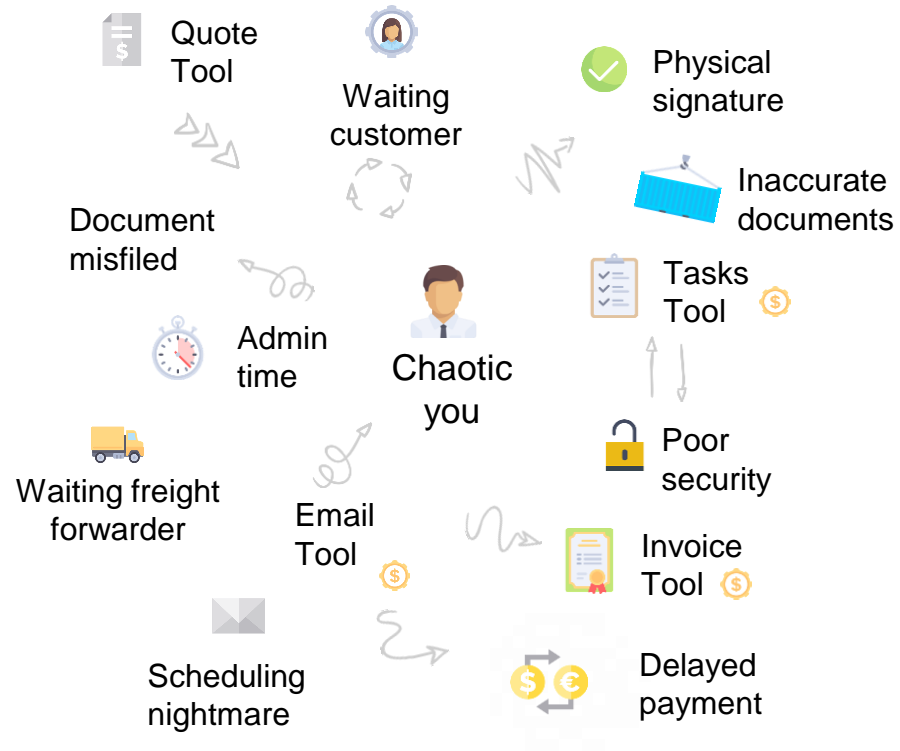


Digital trade and financing

Who we are and what we do

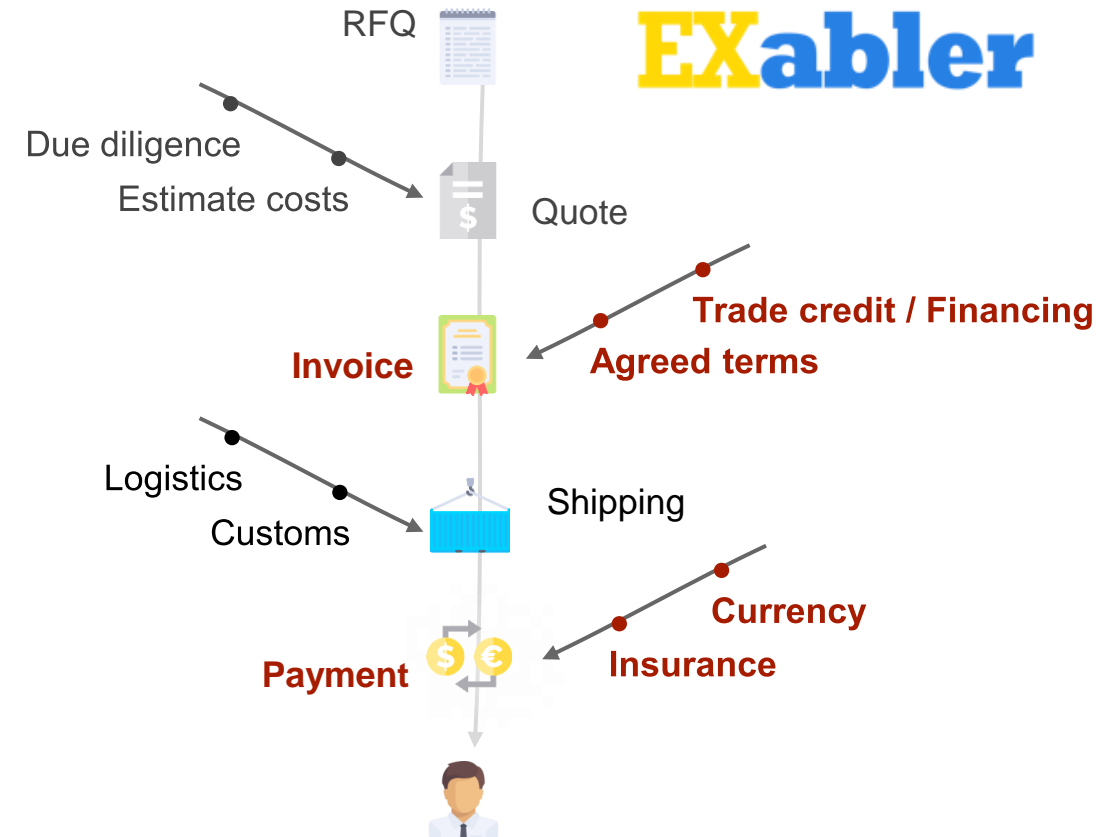
- Exabler is a **global trade solution for businesses** to plan and execute trade, get financed and paid
- **Financial service providers** struggle to serve many customers due to the costs of capital and **cost of gathering information** to comply with regulations
- Exabler's unique trade intelligence tooling can help service providers serve a **larger number of clients more profitably**
- Co-founders are highly technical with combined experience of over 30 years in **finance, risk management and cross border trade**

Exabler improves visibility of company trade activities



Old way

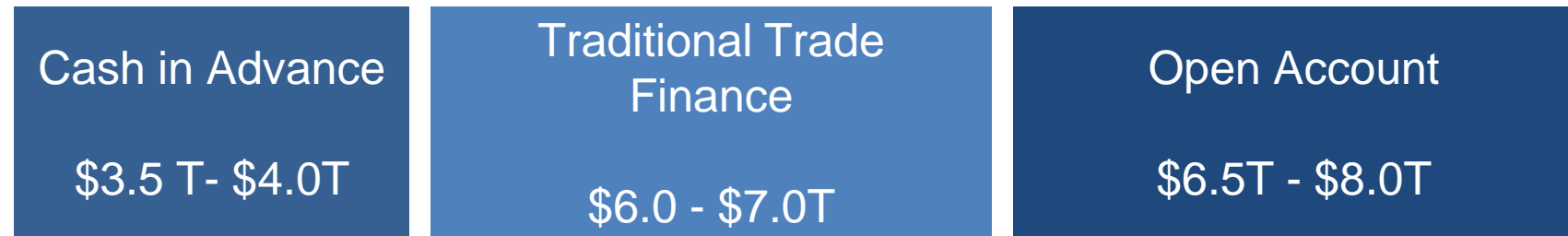
VS



New way

Improved and tailored financial products

Share of global trade by payment type



Improved ability to finance, superior digital offering

Banks

Payment services

Financing

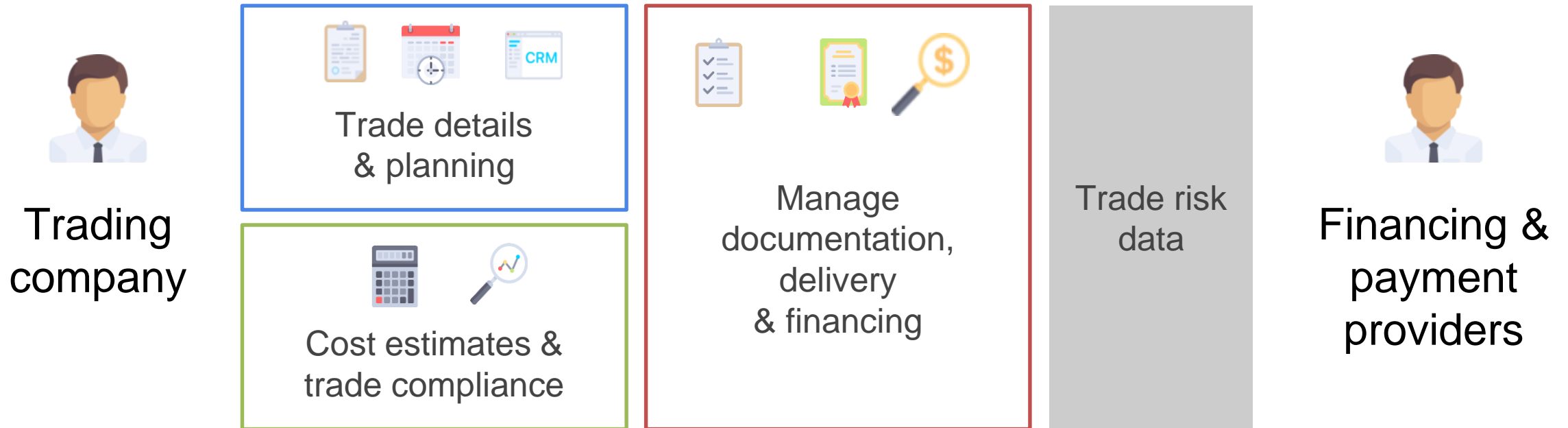
Exabler

Value added services
e.g. transaction information, risk signals, planning tools

Source: Opus, Observations of Trade Finance 2013-18, CEB analysis, IMF estimates

Better trade risk data supports origination and compliance

EXabler



Sovereign Intelligence

Actionable | Predictive | Efficient



SOVEREIGN
INTELLIGENCE



Sovereign Intelligence

- How companies mitigate risk has changed forever
- Rapidly evolving networks of non traditional communication
- Vast quantities of data, hard to glean intelligence
- Exponential rise in risk and complexity
- Similar patterns in commerce and law enforcement

We've redefined the intelligence workflow. By applying AI to unstructured external *and* enterprise data our customers can quickly make accurate decisions.

High-fidelity data meets artificial
intelligence



The Answer?



Frame the Right Questions



Interrogate the Right Sources



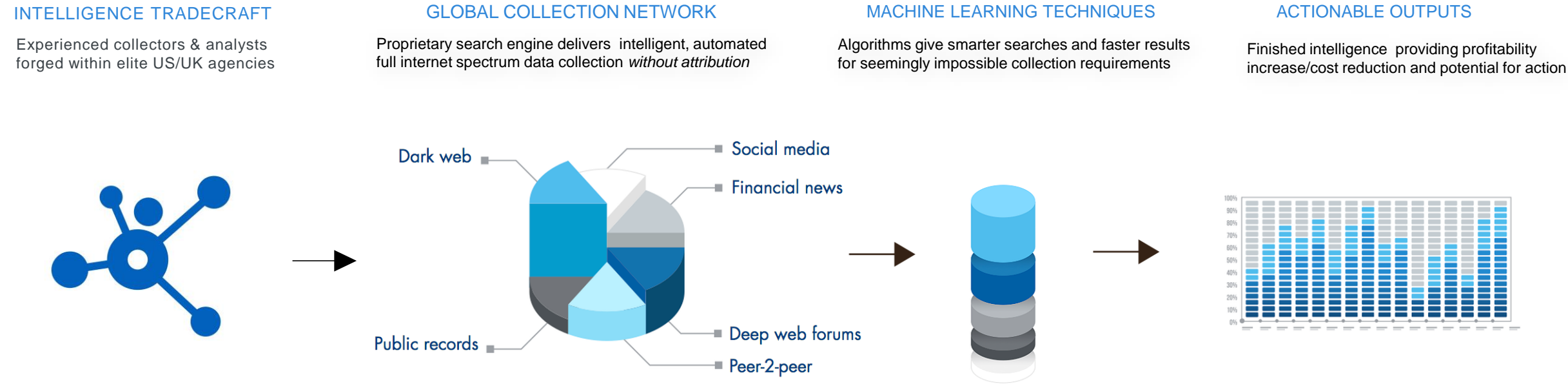
Leverage the Latest Artificial Intelligence



Demand Actionable Insight



Actionable, predictive intelligence extracted from all digital sources



Problems we solve

1 Who is a threat?

We identify Bad Actors initiating threats against institutions, their motivations, techniques, and ultimate goals.

2 Harder Questions?

We answer questions that others raise through deeper-dive investigations, i.e. who created the malware, what's the real ID of the Bad Actor, etc.

3 The So-What Questions?

We provide insight for shaping network security posture, while addressing policy, compliance, privacy, and legal matters.

4 Long term strategy?

We address the strategic questions based on deeper analysis of threats to help you plan for the long term.



Use Cases



Financial Exploitation



Intrusions & Leaks



Due Diligence



Brand/Reputation Monitoring



Counter Terrorism & Crime Prevention



Use Cases

Credit Card & PII Compromise

Compromised credit card information associated with a xxx Banking customer was discovered and identified. The stolen credit card information was extracted from an infamous deep web English-speaking financial fraud marketplace known as *Buy Best Biz* for \$70.00 (USD) / 0.0087 (BTC).

Client Implications:

The compromised credit card information in plain text (.txt) revealed PII: Bank Identification Number (BIN) - 402396; Track 2 Data - 4023962143000780=19052011316436100132 ; Carr - 201; Payment Card - Visa; Level - Premier; Bank - xxx Bank, Ltd. From data breach referenced amidst the digital

underground as Bring Spring - 8 - Wisteria.
SOVEREIGN INTELLIGENCE

BUYBEST.BIZ

Bin	Carr.	Type	Refund	CD	Bank	Country	State	Base	Price
402396	201	VISA PREMIER	Yes	CREDIT	VANQUIS BANK, LTD.	GBR	FL	BRING SPRING - 8 - WISTERIA	\$ 70

track 2

4023962143000780=19052011316436100132*VISA*PREMIER*VANQUIS BANK, LTD.*CREDIT*GBR*USA, FL*BRING SPRING - 8 - WISTERIA*\$70

Bin	Carr.	Type	Refund	CD	Bank	Country	Dumped in	Base	Qty	Price		
402396	201	VISA GOLD	Yes	CREDIT	VANQUIS BANK, LTD.	GBR	USA, TX, Houston, 77098	ADOLESCENT 135 - WITH ZIP	1	\$ 91	1	To cart

track 142

| 402396 | 200 | VISA GOLD | Yes | CREDIT | VANQUIS BANK, LTD. | GBR | USA, HI | OBSIDIAN - 4 BLACK FRIDAY | 1 | \$ 65 | 1 | To cart |

track 2

| 402396 | 201 | VISA GOLD | Yes | CREDIT | VANQUIS BANK, LTD. | GBR | USA, WA | OBSIDIAN - 4 BLACK FRIDAY | 1 | \$ 65 | 1 | To cart |

track 2

| 402396 | 201 | VISA GOLD | Yes | CREDIT | VANQUIS BANK, LTD. | GBR | USA, MD | OBSIDIAN - 3 BLACK FRIDAY | 1 | \$ 48 | 1 | To cart |

track 2

| 402396 | 201 | VISA GOLD | Yes | CREDIT | VANQUIS BANK, LTD. | GBR | USA, TX | TYRELL | 1 | \$ 65 | 1 | To cart |

track 2

| 402396 | 201 | VISA GOLD | Yes | CREDIT | VANQUIS BANK, LTD. | GBR | USA, FL | UNBROKEN | 1 | \$ 65 | 1 | To cart |

track 2

| 402396 | 201 | VISA GOLD | Yes | CREDIT | VANQUIS BANK, LTD. | GBR | USA, NY | SILVER INFINITE MILLION BREACH - PART 3.1 | 1 | \$ 65 | 1 | To cart |

track 2



Use Cases

Compromised Credit Card Data

A Russian-speaking underground vendor - *xpoint*, was identified and discovered advertising compromised credit card information associated with xxx Banking customers.

Client Implications:

The vendor was discerned amidst an infamous deep web Russian-speaking carding community known as *SKY-FRAUD*. Across a community discussion forum thread titled, UK CVV NON VERIFY, *xpoint* states, “402396 xxx BANK, LTD. CREDIT PREMIER UNITED KINGDOM.”



Use Cases

Carding Guide

An English-speaking Telegram Channel - *Hack Everything*, was identified and discovered posting a Carding Guide stating to focus on “providers that aren’t large banks, so companies like xxx”

Client Implications:

The Telegram channel - *Hack Everything* - was identified holding over 26,000 members. Specific xxx targeting across this channel can produce a large increase in demand for xxx card information and carding attempts.

HACK EVERYTHING

-Fullz
Most important thing is fullz.

===== F U L L Z =====
All cards have a BIN (Bank Identification Number), this is basically the first 6 digits of the card. What this info will tell you is the bank the card corresponds too and also what type of card it is e.g. visa platinum etc. Now there isn't really a list of good BINs in my view. That's always evolving and you'll build a list yourself of good BINs over time that have worked for you.

I personally always look for credit BINs first, and also providers that aren't large banks, so companies like Vanquis, MBNA, Capital One, Luma, etc.

The good thing with the smaller credit card providers is you usually can check the balance of the card via simple call to their automated line that usually asks for simple info like card number and DOB. This is also a good way to confirm the info you have is valid and the DOB is correct. Also If I remember correctly you can do this with Santander as well – they also just require the card number and DOB if memory serves me correct.



Use Cases

Leaked Credentials

On December 16, 2017, a Russian-speaking underground user - *FSeller*, was identified and discovered posting leaked emails and passwords including one for current/past xxx Banks employee Megan Clare.

Client Implications:

Leaked employee email credentials increase the risk for unauthorized users to gain access to xxx Bank networks; breaking security for xxx databases and confidential documents.

```
cockell.n@nottinghamhigh.co.uk:Pw128650
ms130619@falmouth.ac.uk:Mitch123
[redacted]co.uk:Megan1989
jake@spresti.co.uk:rabbit623
garveyj@smuc.ac.uk:Sheffwed7
```



Use Cases

Human Trafficking

Intelligence provided by Sovereign aggregated from online escort listings, registries, networks, and auction based websites.

Police provided (11) data sources of interest. Sovereign Intelligence identified **(169)** additional data sources otherwise unknown and notorious for advertising victims of human trafficking for sexual services.

Spot Alerts highlight sources and behavioral signals/indicators of interest around suspected victims of human trafficking. Behavioral signals/indicators include phone numbers, addresses, victim names/aliases, race, sex, age, build, hair/eye color, scars, tattoos, body marks, body poses and other environmental

Some of the indicators we would look for in the profiles would be:

- 1) Multiple use of same advertised mobile number.
- 2) Nationality – Romanian / Chinese / Eastern European
- 3) Age – 18 – 24 or visually young.
- 4) Picture – bruising / redness / uncomfortable pose of female.
- 5) Use of grammar / spelling mistakes
- 6) Emojis are used a great deal in ads in UK. Not necessarily an indicator
- 7) Same ad construction.
- 8) Picture content / bed / lined / curtains/ furniture
- 9) The use of numbers can be misread. Used as say dress size in ads
- 10) Location– Crime reports/relevant Anti-social behaviour indicate shifts towards new areas.

- 1) Adult Work – www.adultwork.com (our main site)
- 2) Viva Street – www.vivastreet.co.uk
- 3) Back Page – www.backpage.com
- 4) Hotreddot – www.hotreddot.com – Twitter based
- 5) Babylon Girls – www.babylongirls.co.uk
- 6) Peachy Escort – www.peachyescorts.co.uk
- 7) Skokka – www.skokka.com
- 8) Crazy OZ – www.crazyOz.com
- 9) Cracker Ads – www.london.cracker.com
- 10) Max 80 – www.max80.com
- 11) Hallo – www.hallo.co.uk



Use Cases

Propaganda:Russia

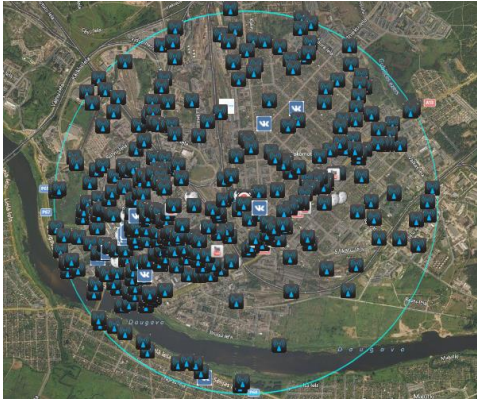
Sovereign investigated possible attempts at propaganda or disinformation from Russian and pro-Russian sources around British presence in Latvia by investigating traditional news sources, as well as (4) popular social media platforms.

“NATO soldiers abase the Baltic population,”

“NATO soldiers will subdue the Russians of Latvia,”

“Women of Latvia are warned - American soldiers might rape them”

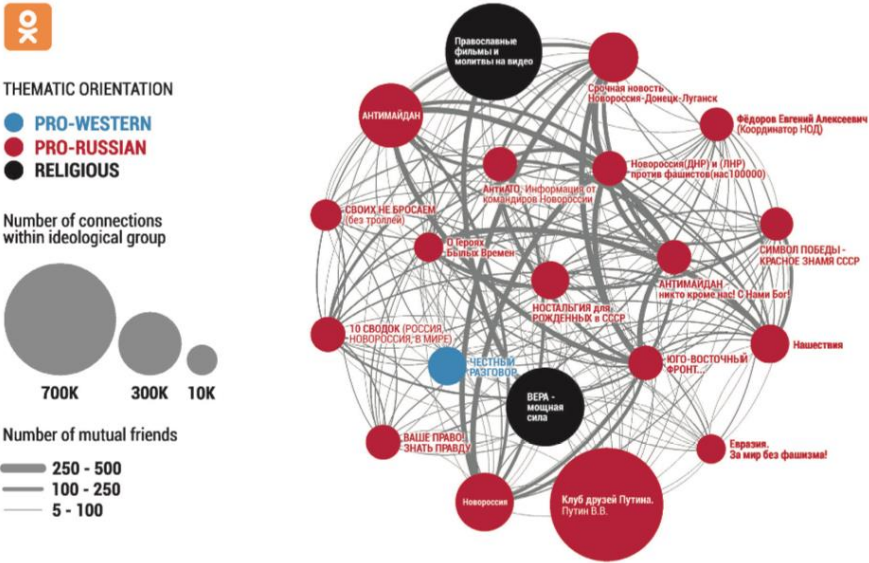
The stories carry a generally anti-NATO sentiment, but include references to British forces and actions. Of all Twitter activity that mentioned NATO and one of the Baltic states, an extremely high percentage was generated by bots: 84% for Russian content and 46% for English content.



Армейский бум @yddgie5180 · Apr 27
Пьяные солдаты НАТО устроили дебош в Латвии. Военнослужащие (предположительно, лейтенанты или капитаны) устроили драку с правоохранителями, будучи в нетрезвом состоянии. Для усмирения дебоширов полицейским пришлось применить перцовый газ.



2 7 6

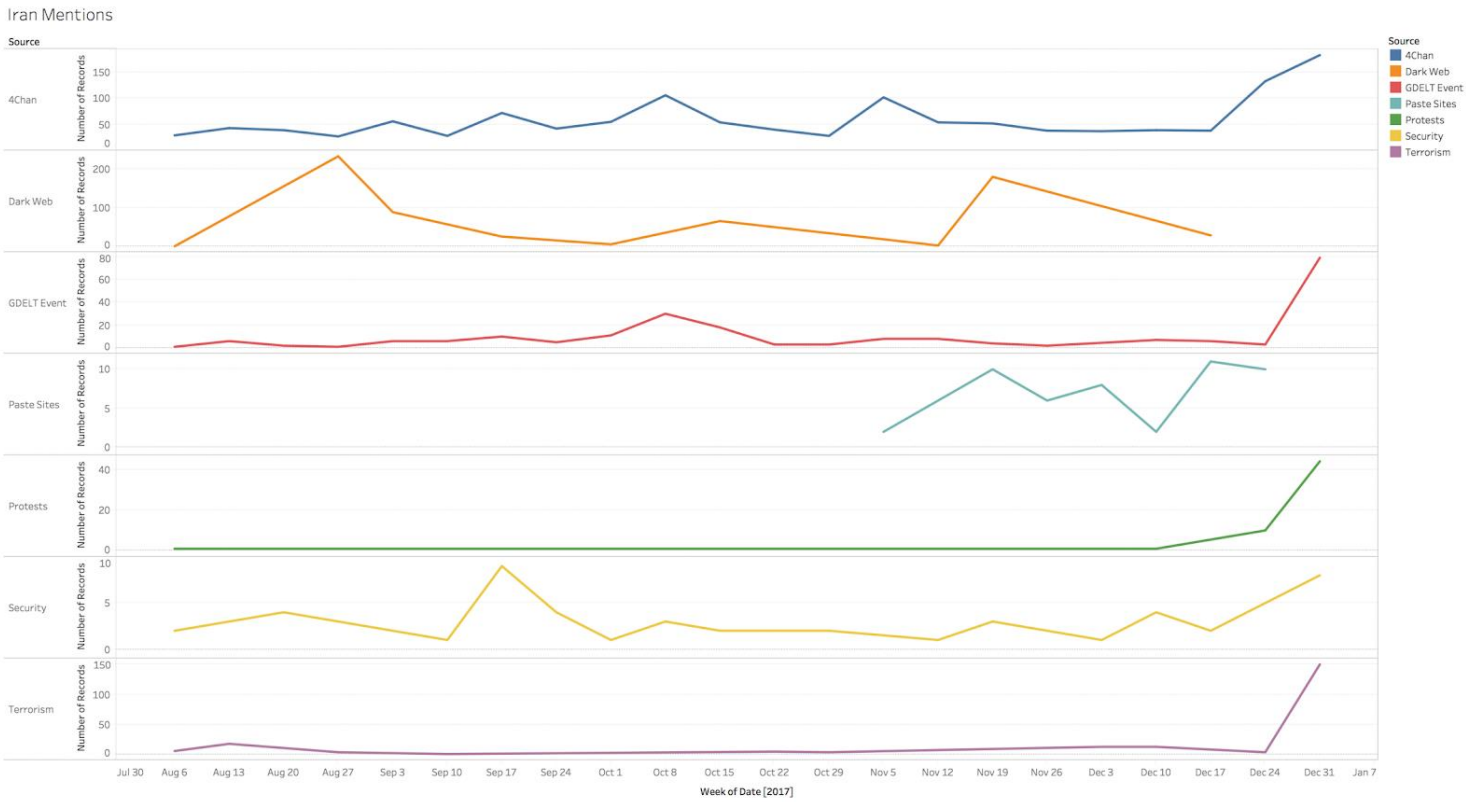


Use Cases

Chatter Analysis: Iran

Iran Protests Erupted December 28, 2017. However, observance of mentions of Iran among 4Chan, Dark Web, and Sovereign’s Global Collection Network of Security, Protest, and Terrorism sites, indicated increased activity as early as December 17th. Note the expected decrease among Dark Web chatter as sources become quiet before an event.

SI’s service also found meaningful intelligence surrounding Iranian cyber threat actors and exploitation activity. SI found eight Persian-speaking underground hacking forums, and over 40+ profiles associated with Iranian hacking groups and independent threat actors for entity extraction, enrichment and monitoring purposes.



The trend of sum of Number of Records for Date Week broken down by Source. Color shows details about Source. The data is filtered on Date Week, which keeps 54 of 54 members. The view is filtered on Date Week, sum of Number of Records and Source. The Date Week filter ranges from August 1, 2017 to January 5, 2018. The sum of Number of Records filter ranges from 1 to 233. The Source filter excludes Twitter Search.



Use Cases

Political Trends

Sovereign provided Facebook with the identities and evidentiary support to take swift action in their recent efforts to stop misinformation campaigns. Facebook deactivated 196 pages and 87 accounts in Brazil for their part in “a coordinated network that hid behind fake Facebook accounts and misled people about the nature and origin of its content, all for the

Facebook removes pages of Brazil activist network before elections

Brad Haynes

4 MIN READ



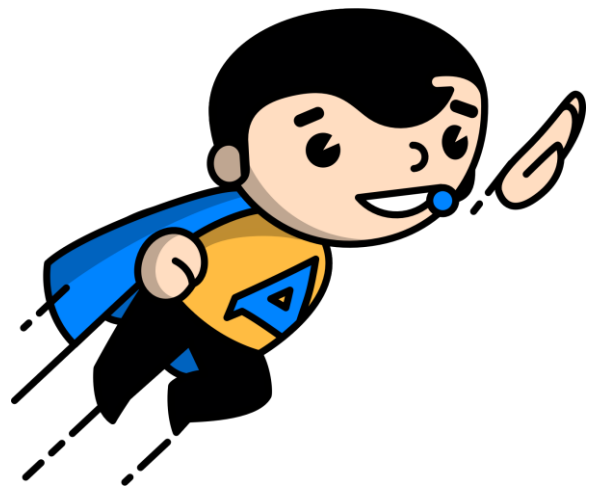
SAO PAULO (Reuters) - Facebook Inc (FB.O) on Wednesday took down a network of pages and accounts used by a right-wing Brazilian activist group, cracking down on what it called a misinformation network ahead of elections in October.





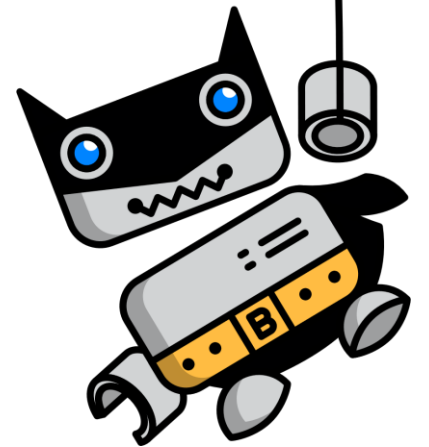
SOVEREIGN

I N T E L L I G E N C E

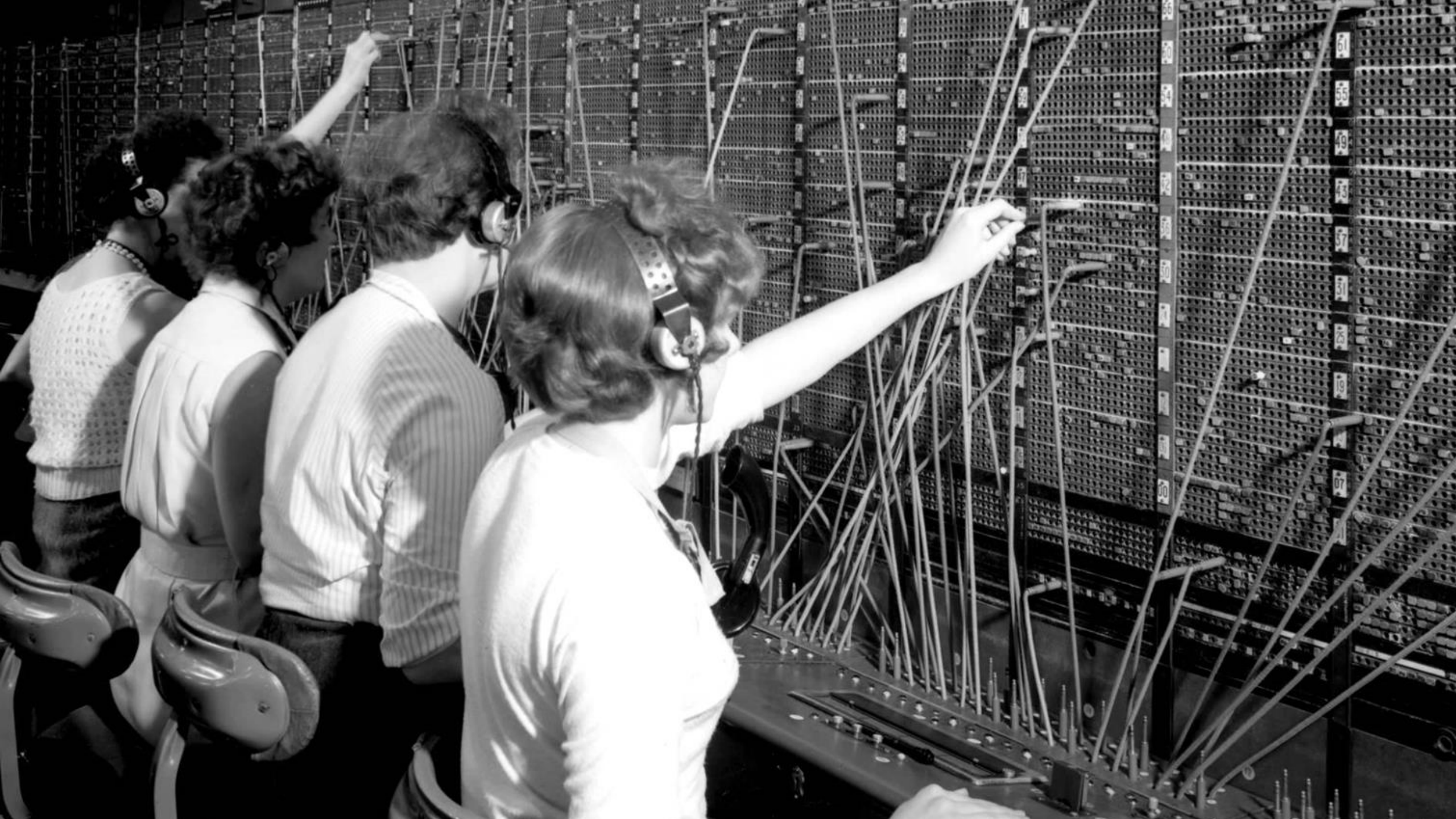


ultimate.ai

AI power your customer service



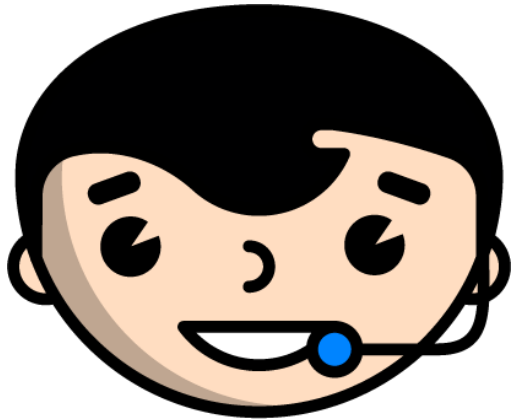
sarah@ultimate.ai



\$1.6 trillion

cost of customers switching due to poor
customer service in the US

(Accenture, 2017)



Augment

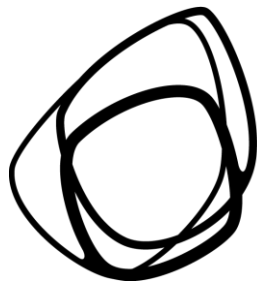


Automate



sarah@ultimate.ai

Countrywide
x kojamo

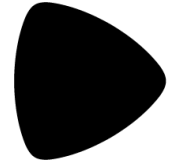


FIN
PRO

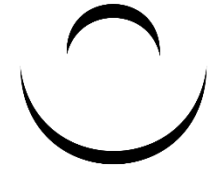
posti



s a n o m a



zalando



FINNAIR

Upseller



Telia

RESTEL

Lendo 

Ontrack®

S=Pankki

elisa



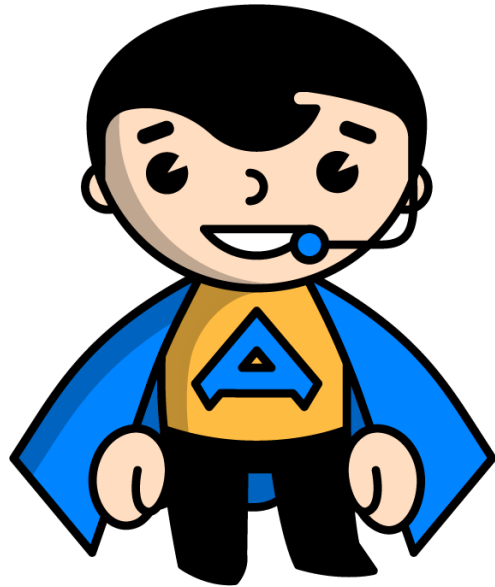
LOCALTAPIOLA



sarah@ultimate.ai

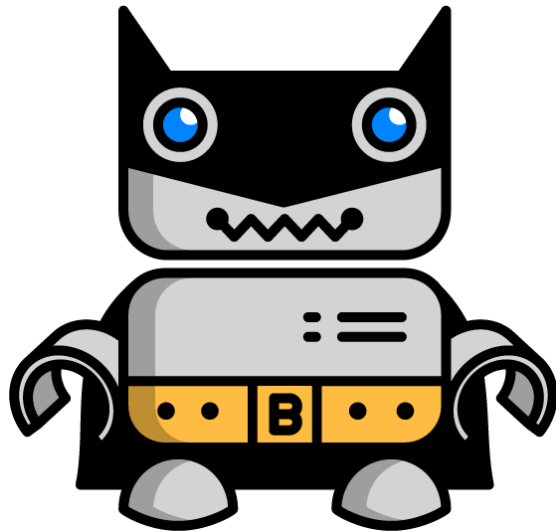
CASE STUDIES

FINNAIR



- Response times **31%** faster
- **25%** increase in number of conversations per hour for highest usage agents





- Conversational process automation is automating **20%** of total volumes, and rising

ultimate.ai

sarah@ultimate.ai

AI for Text with Human-in-the-Loop



www.warwickanalytics.com

23 January 2019



The Problem







...and all ML Models are not created equally!

@Tesco why have u added milk to a perfectly nice soup???? Just to save a few pennies I am DISGUSTID. Cheapskates u have really let me down.

not picked up

Keywords

milk soup

irrelevant

NLP/Basic ML

positive

wrong (misattribution)

Complex, Specific ML

soup Ingredient change

very unhappy

concepts, not keywords

@santanderukhelp cheers, thanks for withholding my cheque for extra days without letting me know you would. Love the clarity you have with your bankers. Good to see I'm just a number and not valued. I'm off.

clarity cheque

irrelevant

positive

wrong (sarcasm)

lack of info withholding cheque

very unhappy

churn

subtle, key intent

The Solution:

The solution is PrediCX



Manual
Coding

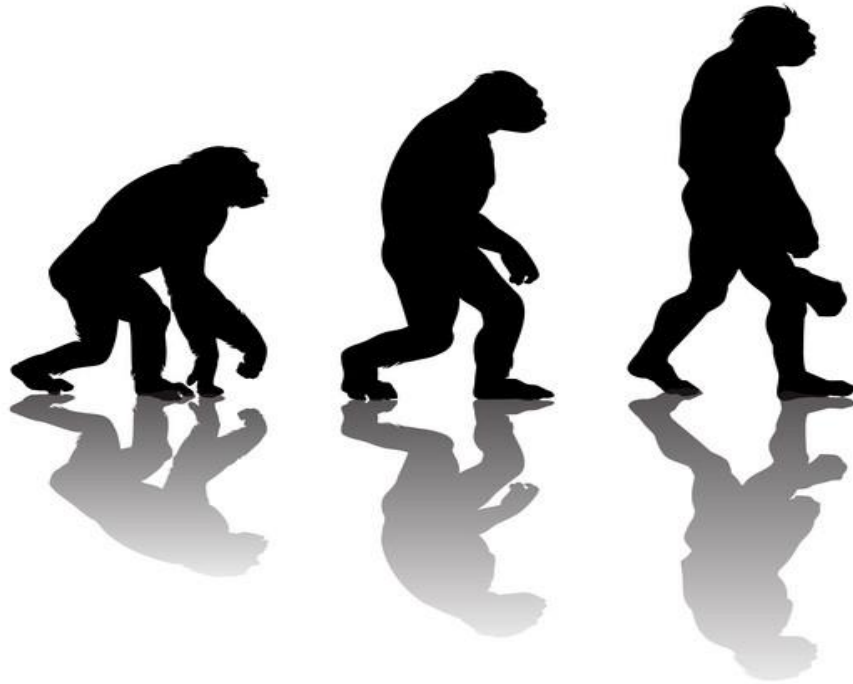
The solution is PrediCX



Manual
Coding

Keywords &
Rules

The solution is PrediCX

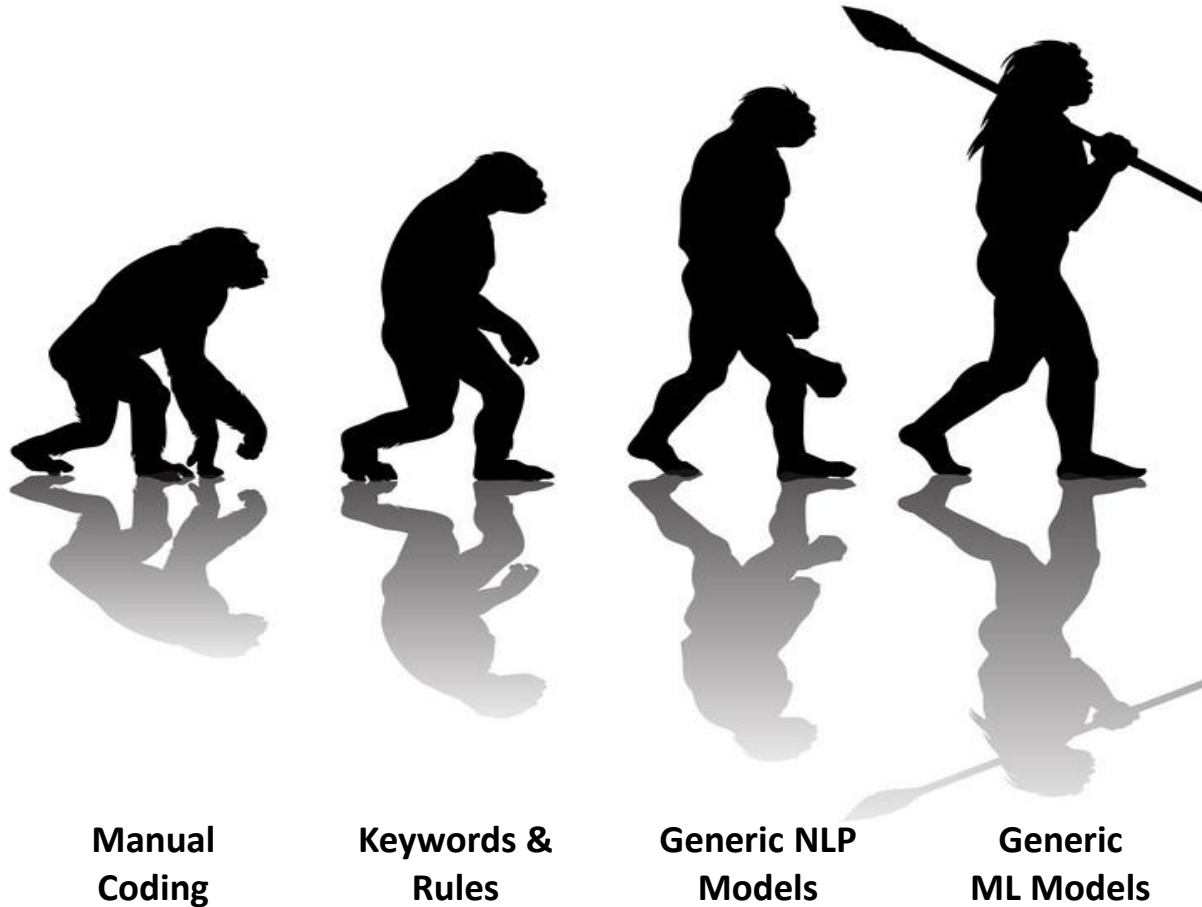


Manual
Coding

Keywords &
Rules

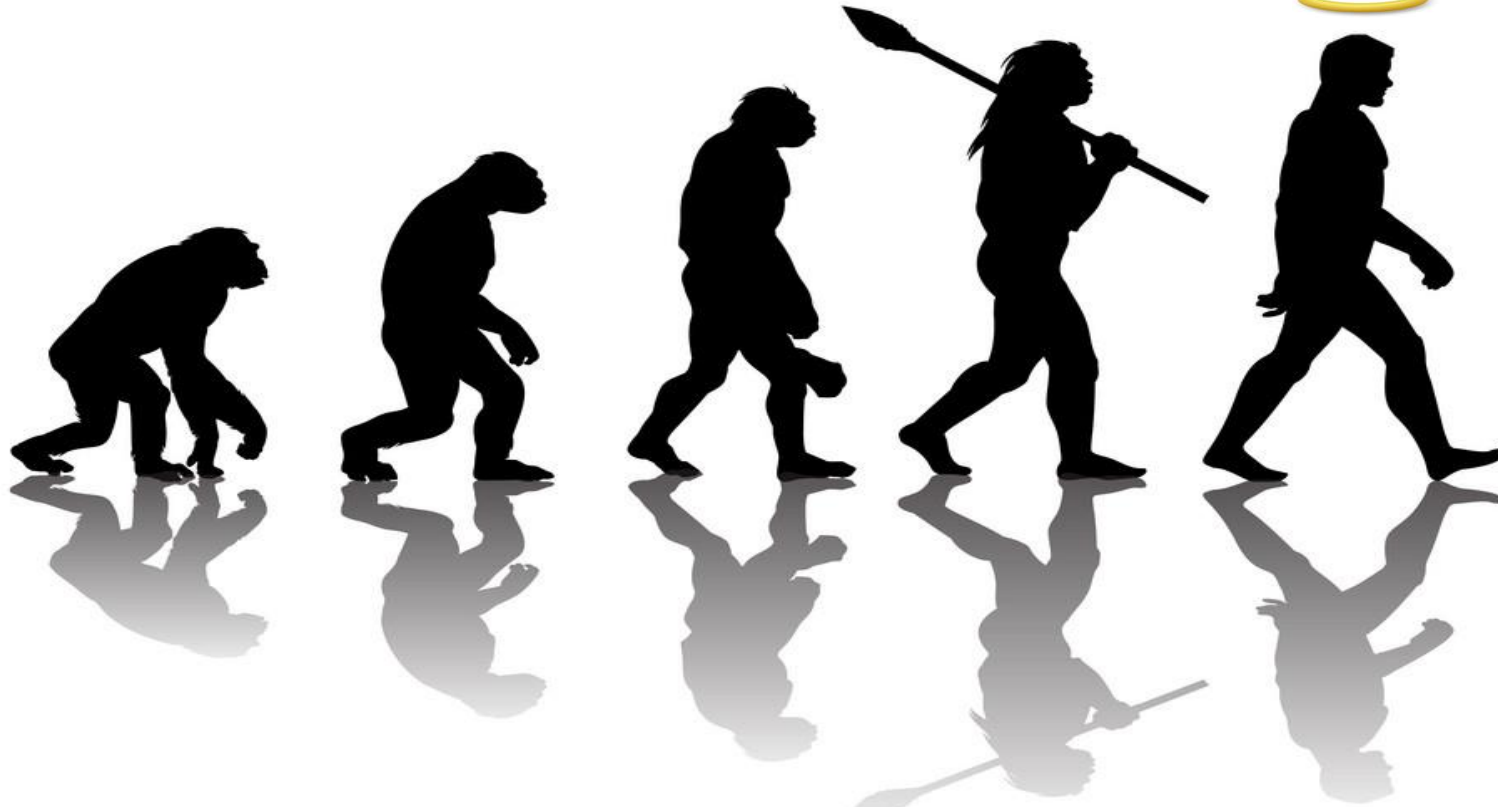
Generic NLP
Models

The solution is PrediCX



The solution is PrediCX

PrediCX



Manual
Coding

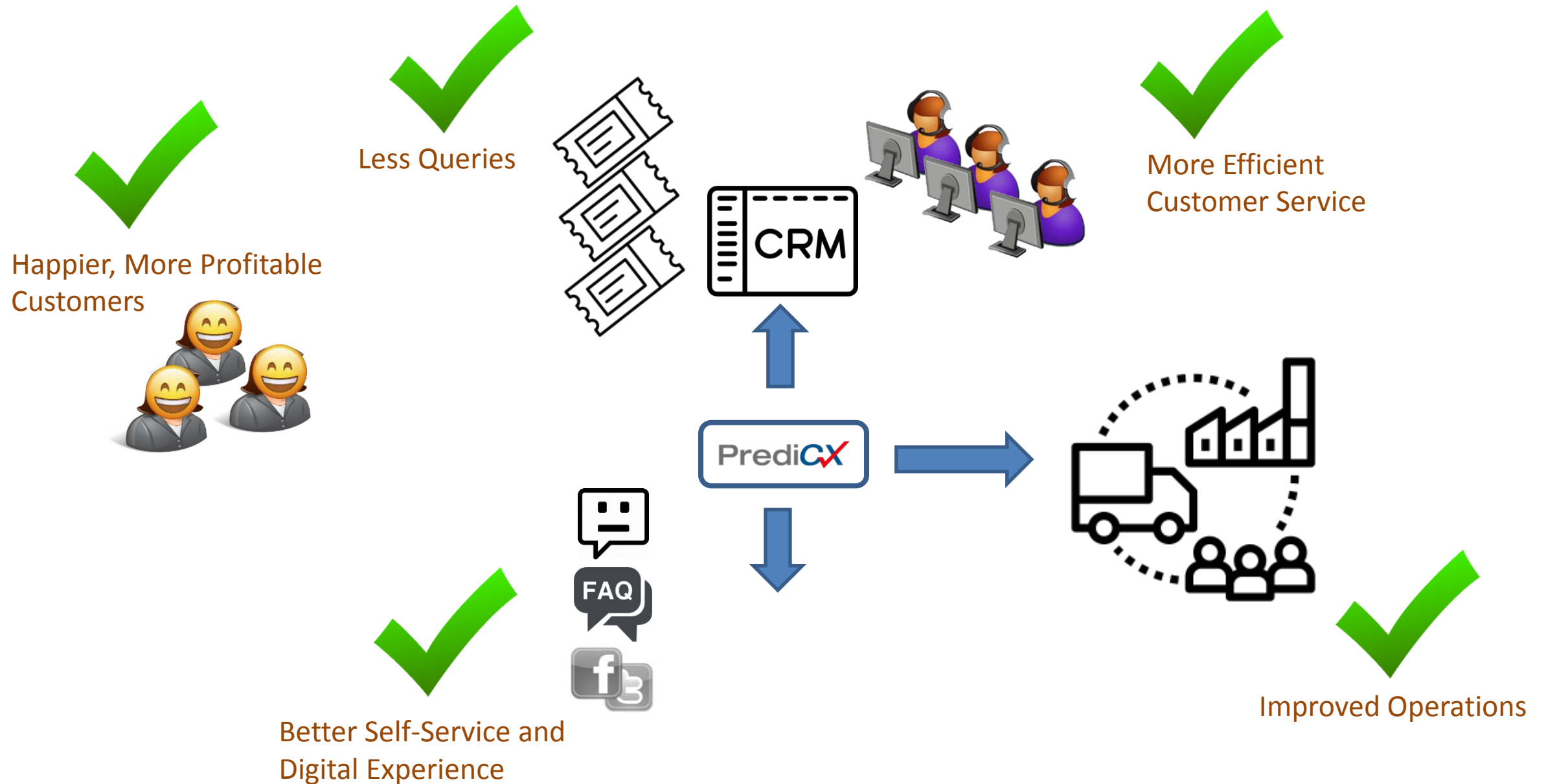
Keywords &
Rules

Generic NLP
Models

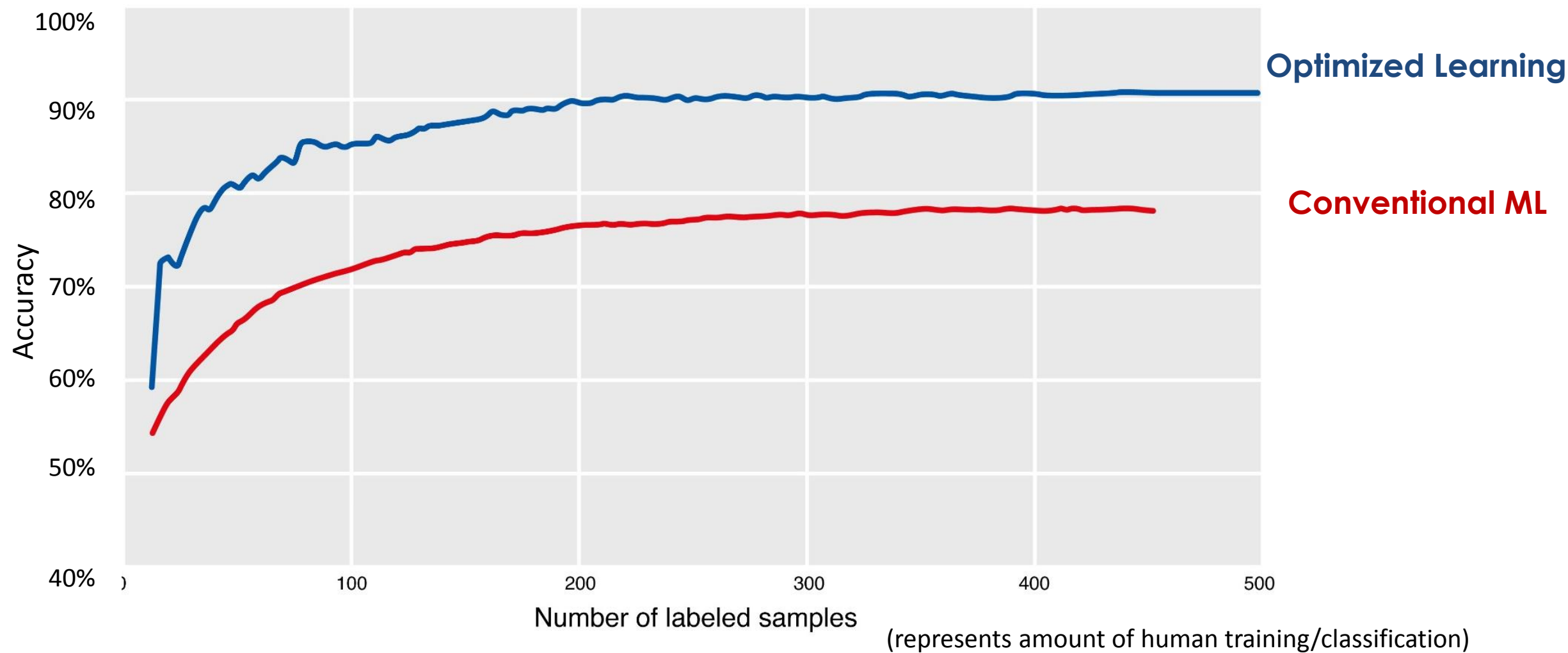
Generic
ML Models

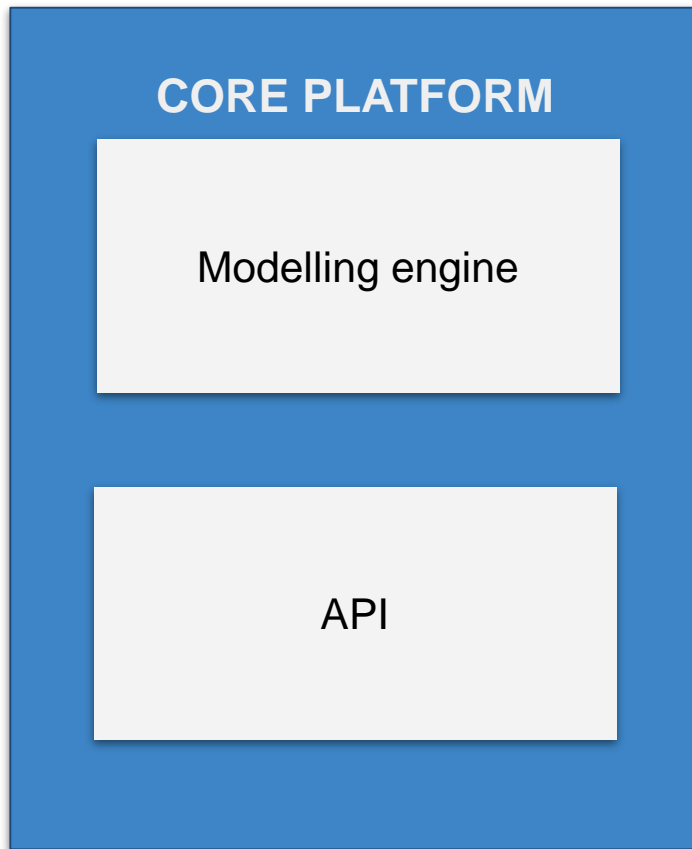
Industry, Company
& Use Case Specific
ML Models

PrediCX optimises customer operations and other processes

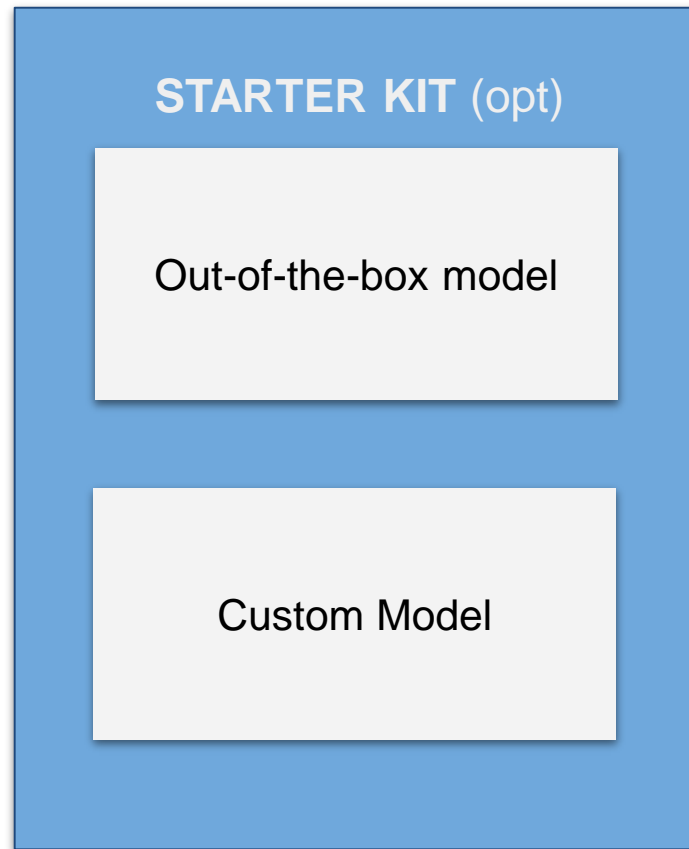


Optimized Learning: minimal effort, maximum performance





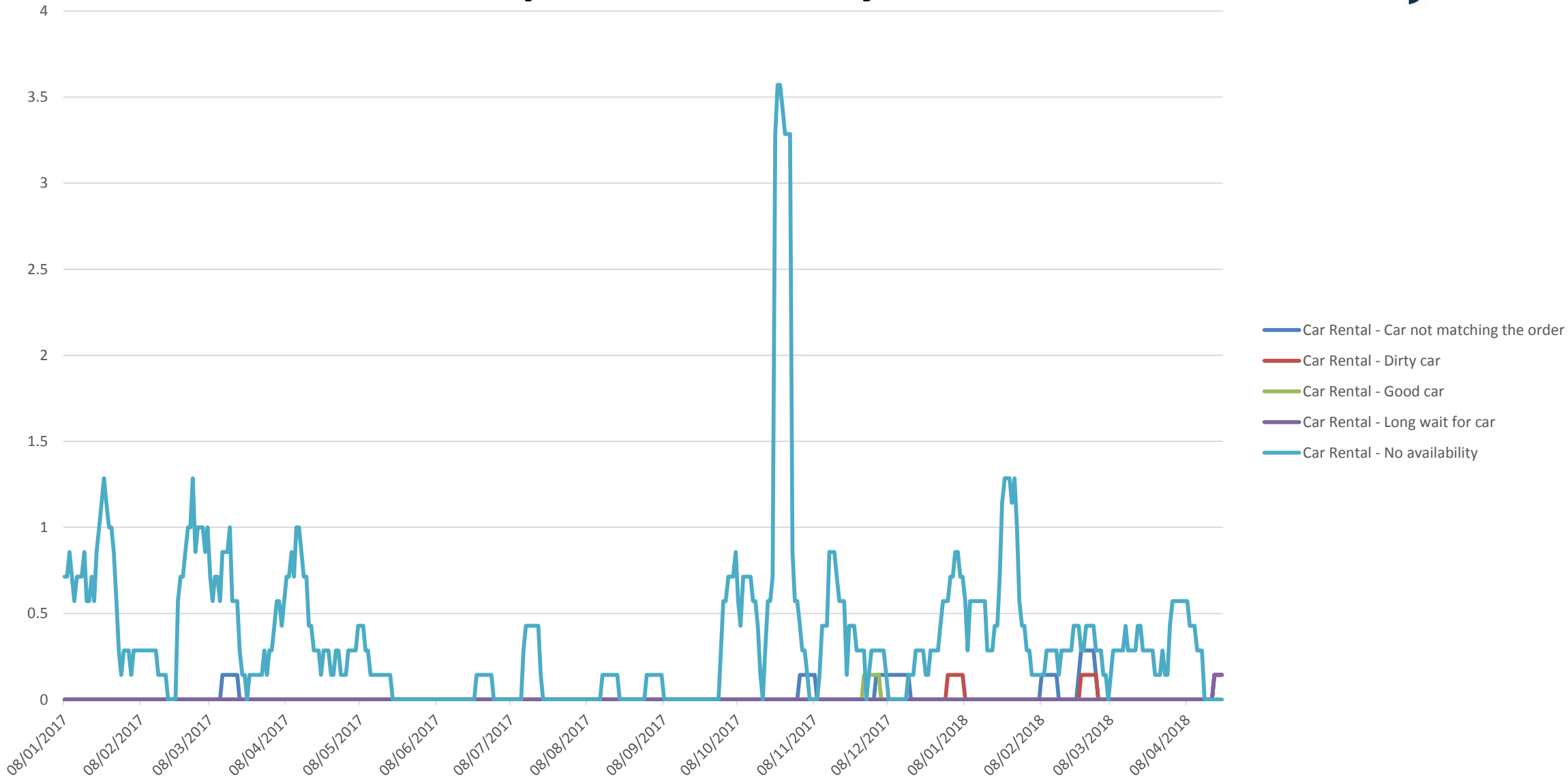
+



- Simple pricing
 - Per record labelled
 - Volume discounts

Case Studies

Car Hire – Concepts not Keywords

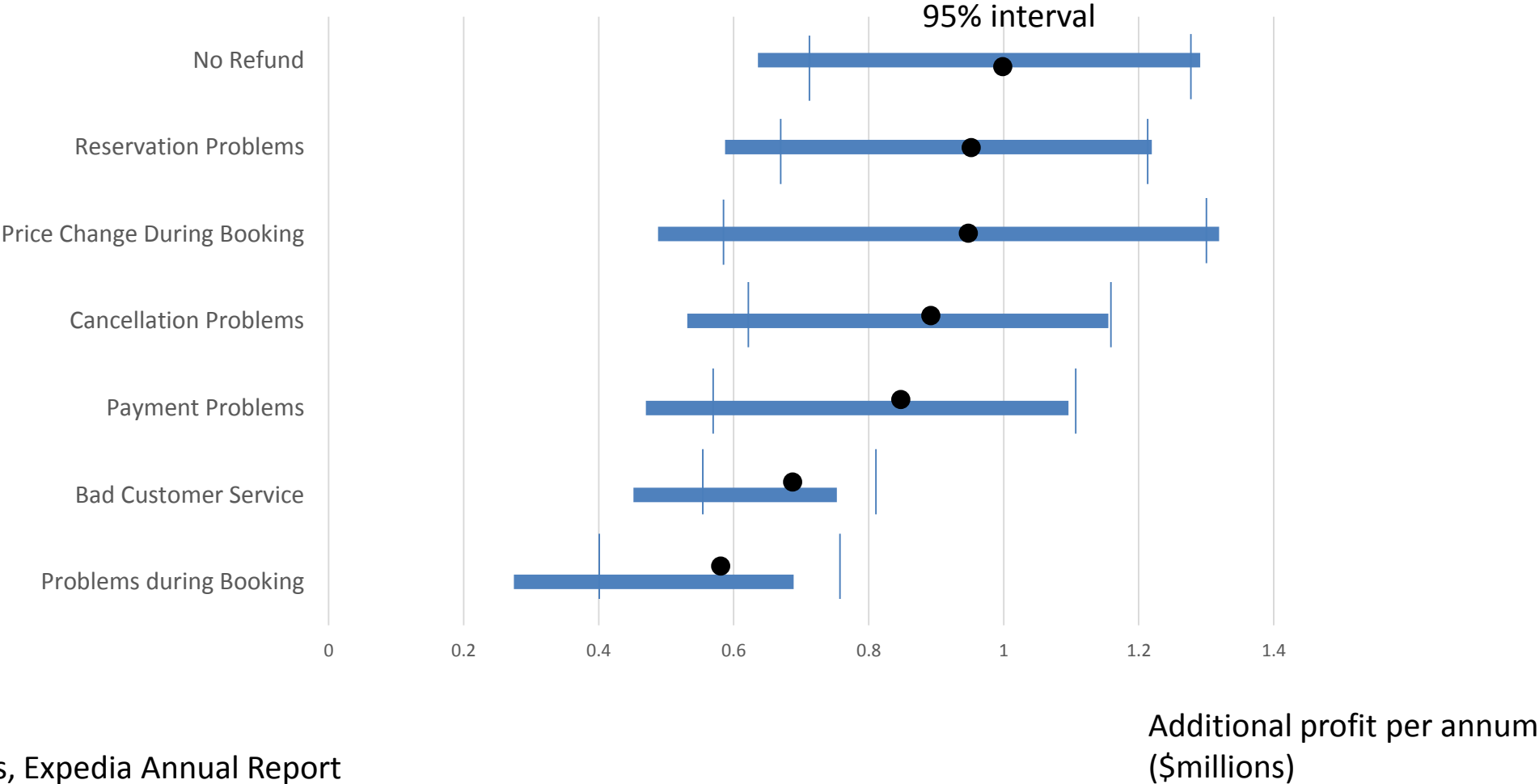


Scale is counts per day, 7-day moving average

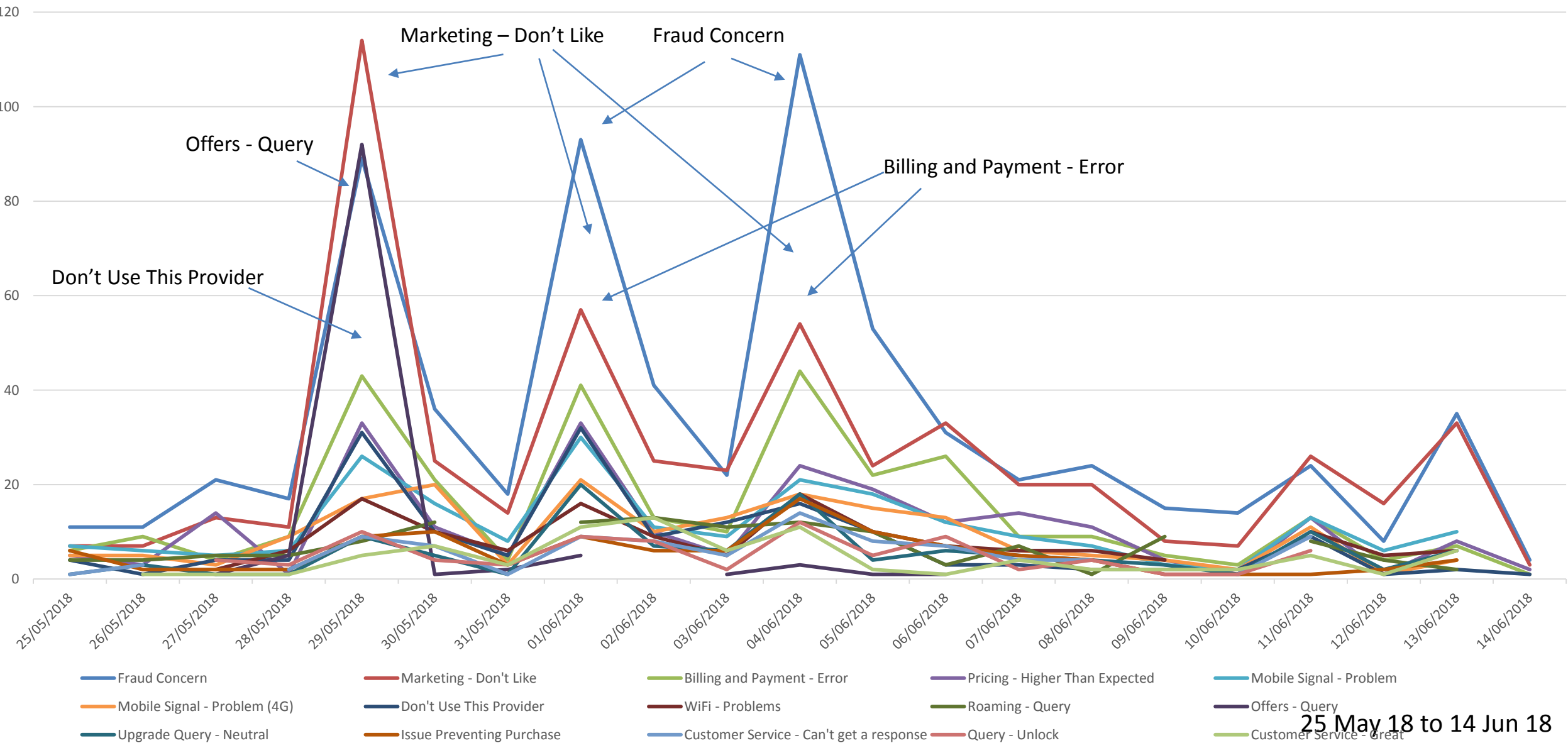
Recommendation Engine



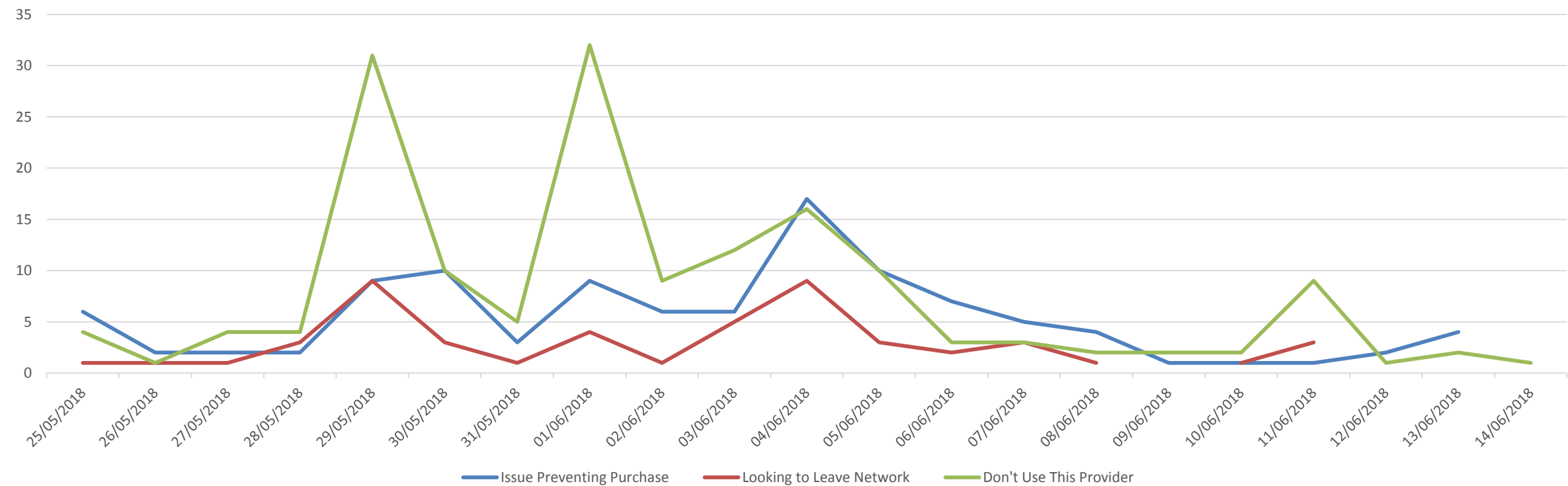
Financial Effect of Improving Top Root Causes of Churn Each by 1%



Twitter – O2's Queries Over Time (Top 15)

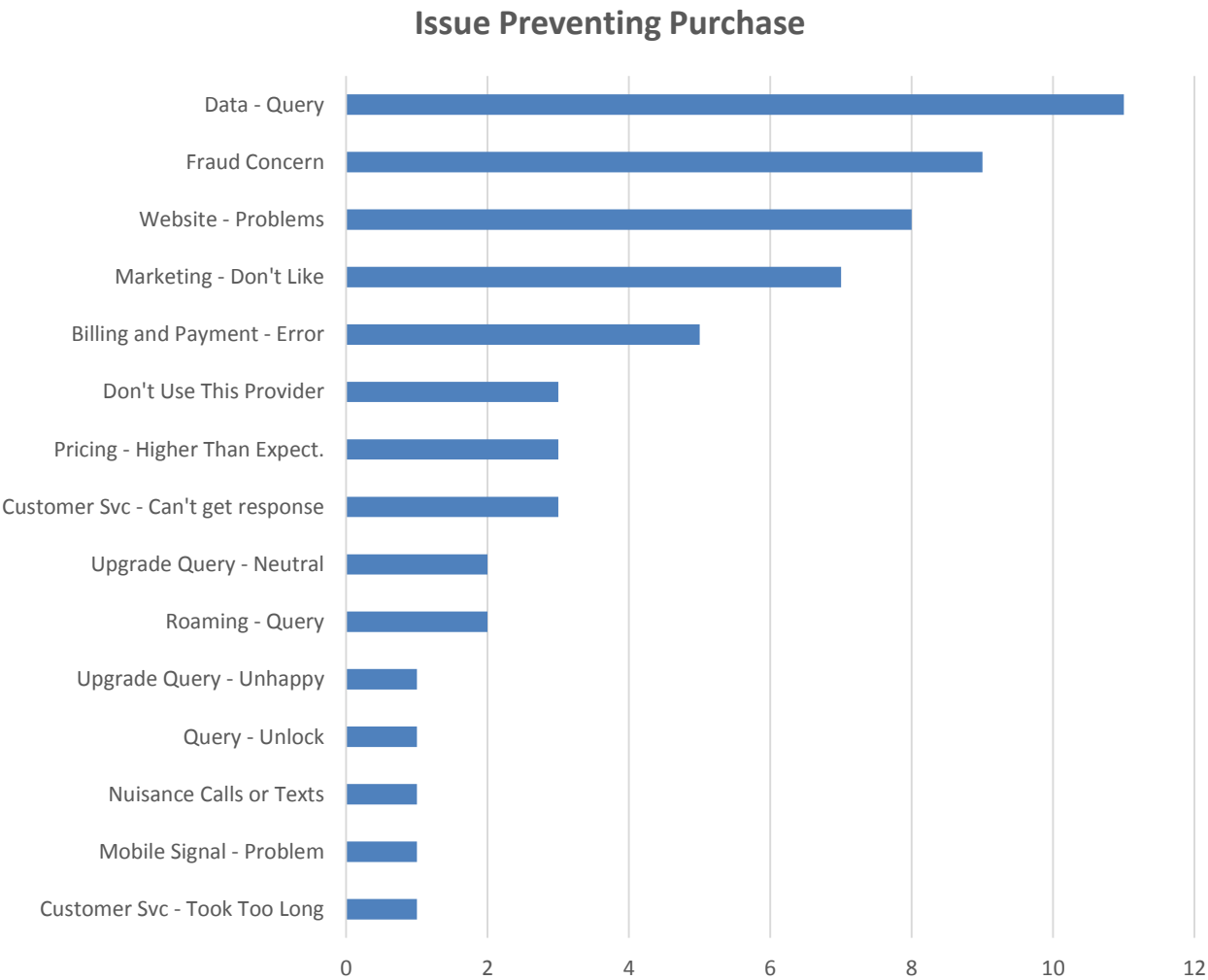


Twitter – O2 Churn Sub-Categories



25 May 18 to 14 Jun 18, queries only.

O2 Reasons for Churn (where given) [cont]



Benefits for Customers

- Rail Co
 - Improved satisfaction 20%
 - Saving 35% costs
- Telco
 - Churn reduction 5%
 - Saving 30% costs
- Bank
 - Identified 10% churn reduction from early warning

Thank You!

How did we do?



ZOA Robotics

Making industrial plants more efficient



TEAM



Thiago Azevedo

Founder & CEO

Commercial Director MGT
Biomass Plant

£950m project finance, under construction.

Commercial Director
Shadow Robot

Turned losses into profit.



Enrique del Sol

Lead Robotics Eng.

PhD Robotics Control

Seven years experience designing and controlling **robots in nuclear** industry, solar plants and for teleoperation.

Member of The Institution of Engineering and Technology (MIET).



Daniel Zheng

Lead Machine Learning

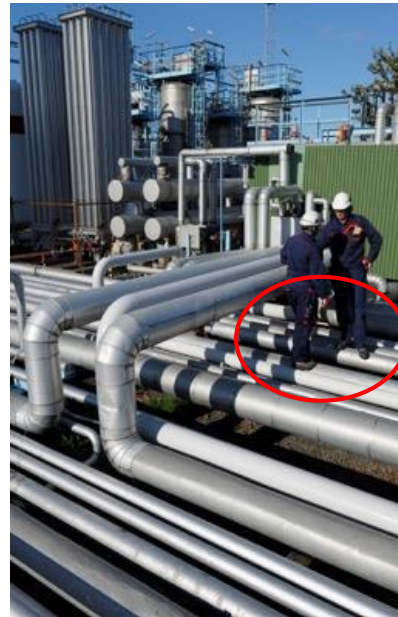
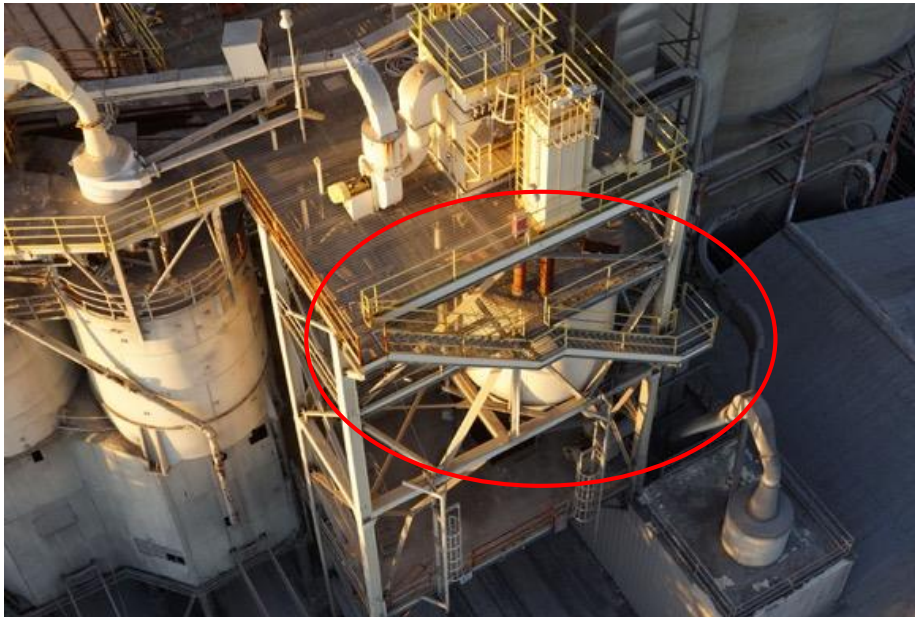
Machine Learning
Engineer with 2 years experience applying ML to robotics at **Dyson**.

BA + MMaths, Distinction

PROBLEM

Industrial plants spend vast sums on routine inspections

- High labour costs
- Expensive un/scheduled outages
- Not automated



PROBLEM



Single Task



Limited Mobility



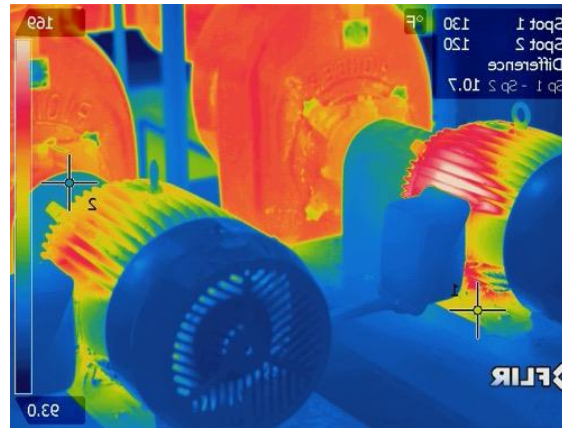
High Labour Cost
Health & Safety issues!

Existing robots are not effective – no autonomous solutions for industrial sites

SOLUTION



10x cheaper total
mobility



Autonomous data
gathering

Telepresence



Subscription
service reports

VALUE



More and better data from automation

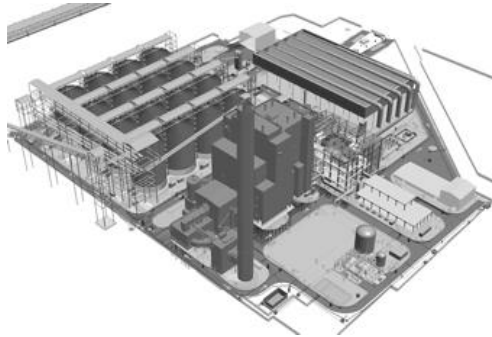
- More productive staff (good)
- Lower scheduled maintenance costs (great)
- Less plant downtime (excellent)

TRACTION

Three trials with keen early adopters



Keep **unsafe plant** online during routine inspections.

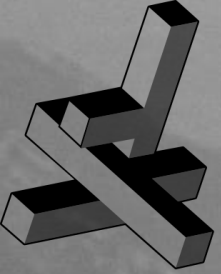


Inspections in **unsafe areas when faults suspected.**

Letter of Intent signed



Permanently based robot in unmanned, remote sites.



**FOUNDERS
FACTORY.**

innovation
martlesham

Thank you

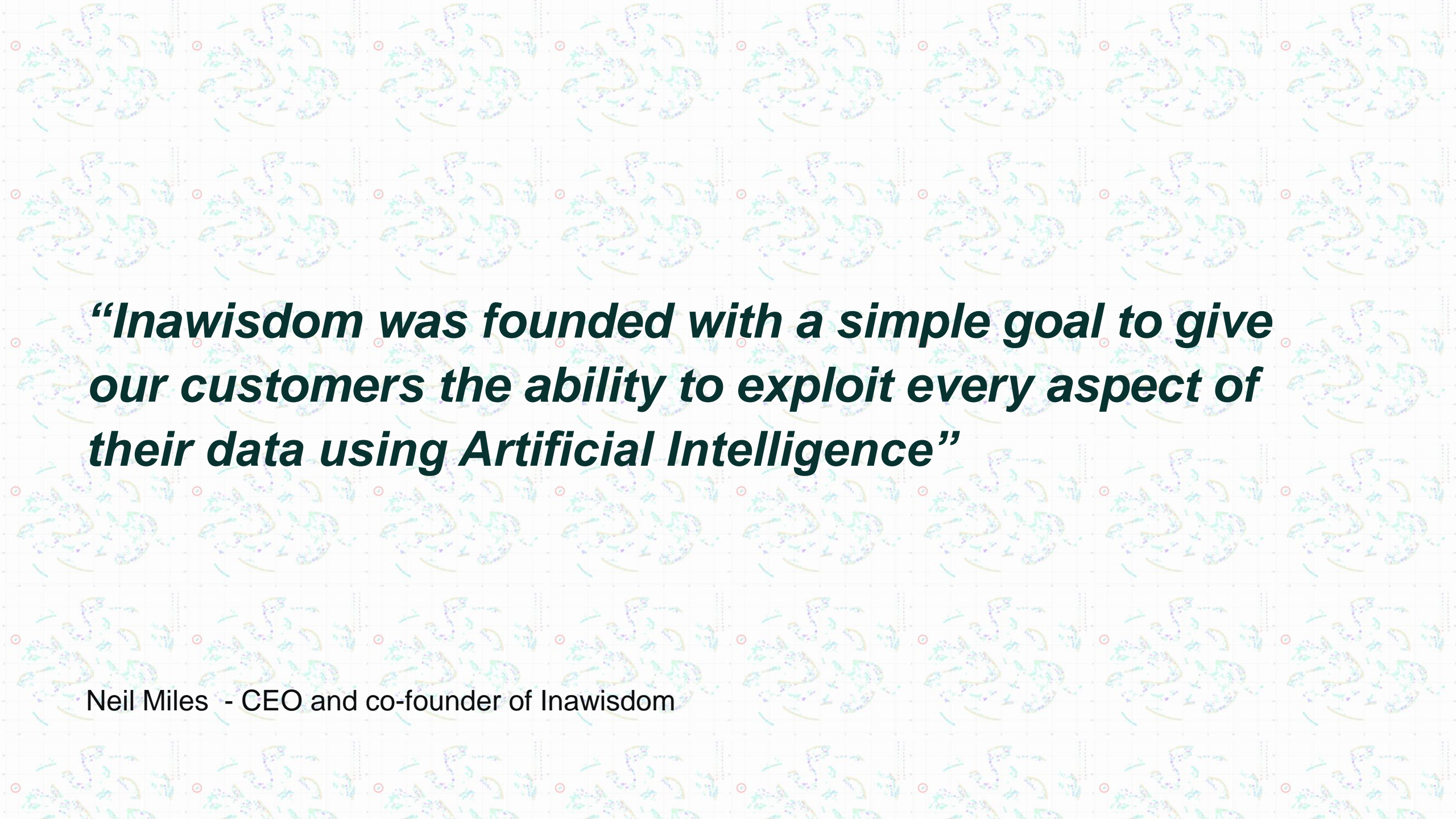
Making industrial plants more efficient

thiago@zoarobotics.com



NEIL MILES
CEO, INAWISDOM



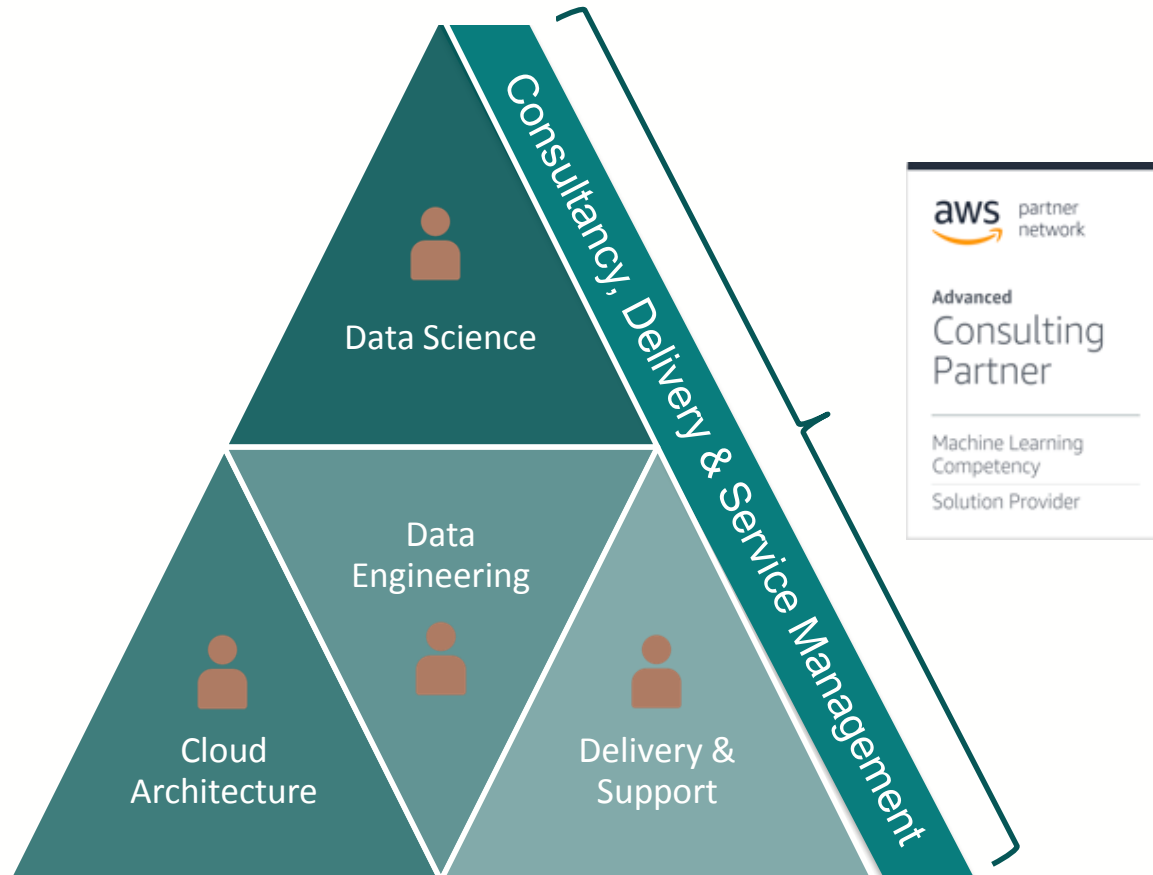


“Inawisdom was founded with a simple goal to give our customers the ability to exploit every aspect of their data using Artificial Intelligence”

Neil Miles - CEO and co-founder of Inawisdom

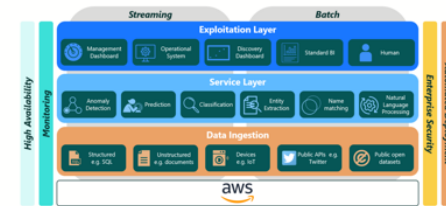
WHAT WE ARE

Advanced Analytics and Data Science specialists Delivering the full stack of data services



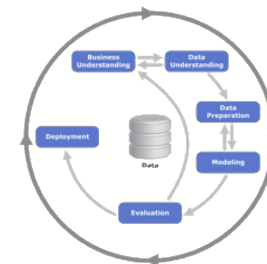
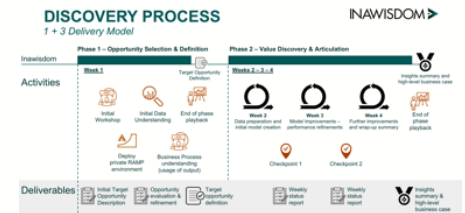
WHAT WE DO INAWISDOM ➤

Use our accelerator proven Tools, Methods and Rapid approach to realise the opportunity in your data.



RAMP (Rapid Analytics & Machine Learning Platform)

Standard Engagement Template



Follow our proven method. Benefit from our experience

AI/MACHINE LEARNING BUSINESS OPPORTUNITY



Top line



New revenue streams

Increase customer wallet share



Brand perception

Improve customer acquisition,
conversion, retention



Bottom line



Compliance

Identify and reduce fraud



Better assessment of risks

Decrease preventive
maintenance costs / manage
asset downtime





“Ultimately the value of AI is not in the models themselves but in the organisations ability to harness them....”

THANK YOU

Contact Us:
Neil@inawisdom.com

07778 135984

@Inawisdom



AI enabled Cloud Contact

Astute Solutions

BT Augmented Intelligence Event, January 2019

Business goals

Reduce Customer Issues
Resolution Time



Increased efficiency
Cost Reduction

Reduce Transaction
Volumes through
Smarter Self Service



Contact avoidance
Cost Reduction

Increase Customer
Satisfaction



Happy customers
Advocacy

Enhance
Brand Loyalty



Sustain/increase revenue
Repeat business

Improve Booking
Conversion



Better success rate
Increase Revenue

Provide a Seamless Customer Journey

Digital Self Service



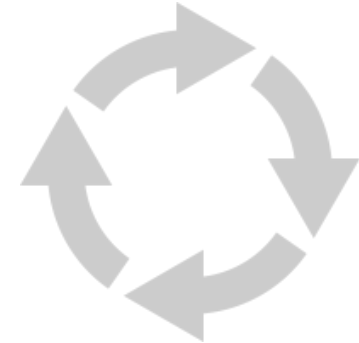
Relevant, up to date content paired with NLP and Machine Learning allows customers to get the information they want when they need it across any digital channel.

Smart Escalation








Escalate customers in the most efficient way possible when self service isn't quite enough. Use conversational context and personalization to get right agent.

Intelligent Agent Engagement



Using an integrated knowledgebase, at-a-glance customer context, and recommended next best actions, empower the agent to answer questions correctly the first time, improving AHT and first contact resolution.

Astute works with some of the world's biggest brands

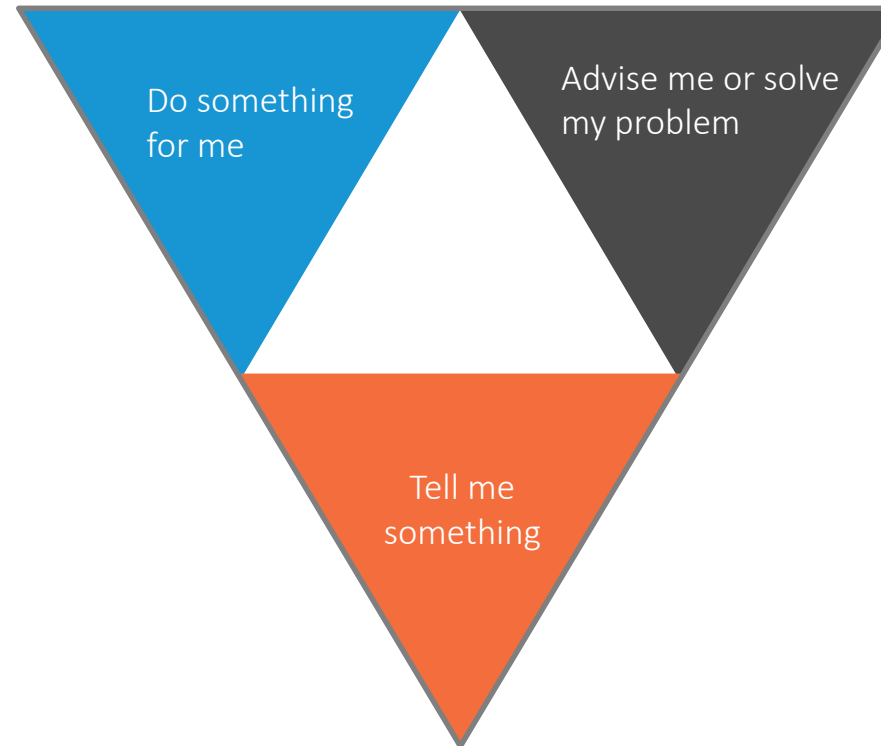
Consumer Goods & Retail	Food & Beverage	Grocery	Restaurant	Transportation	BPO / Outsourcers	Finance & Insurance
    Vera Bradley  Fast-growing as CPG goes retail-as-a-service	     2,000+ everyday brands	     >50% grocery stores use Astute	  Domino's    >25+ most recognized brands	     Transforming approach to consumer relationships	     Best in Class Business Enablement	     Growth focused on operationalizing consumer engagement

We help nearly 250 customers with 2,000+ brands, across 100 countries, in 30 languages... provide exceptional customer experiences that transcend platforms, channels and devices.

Types of Contact

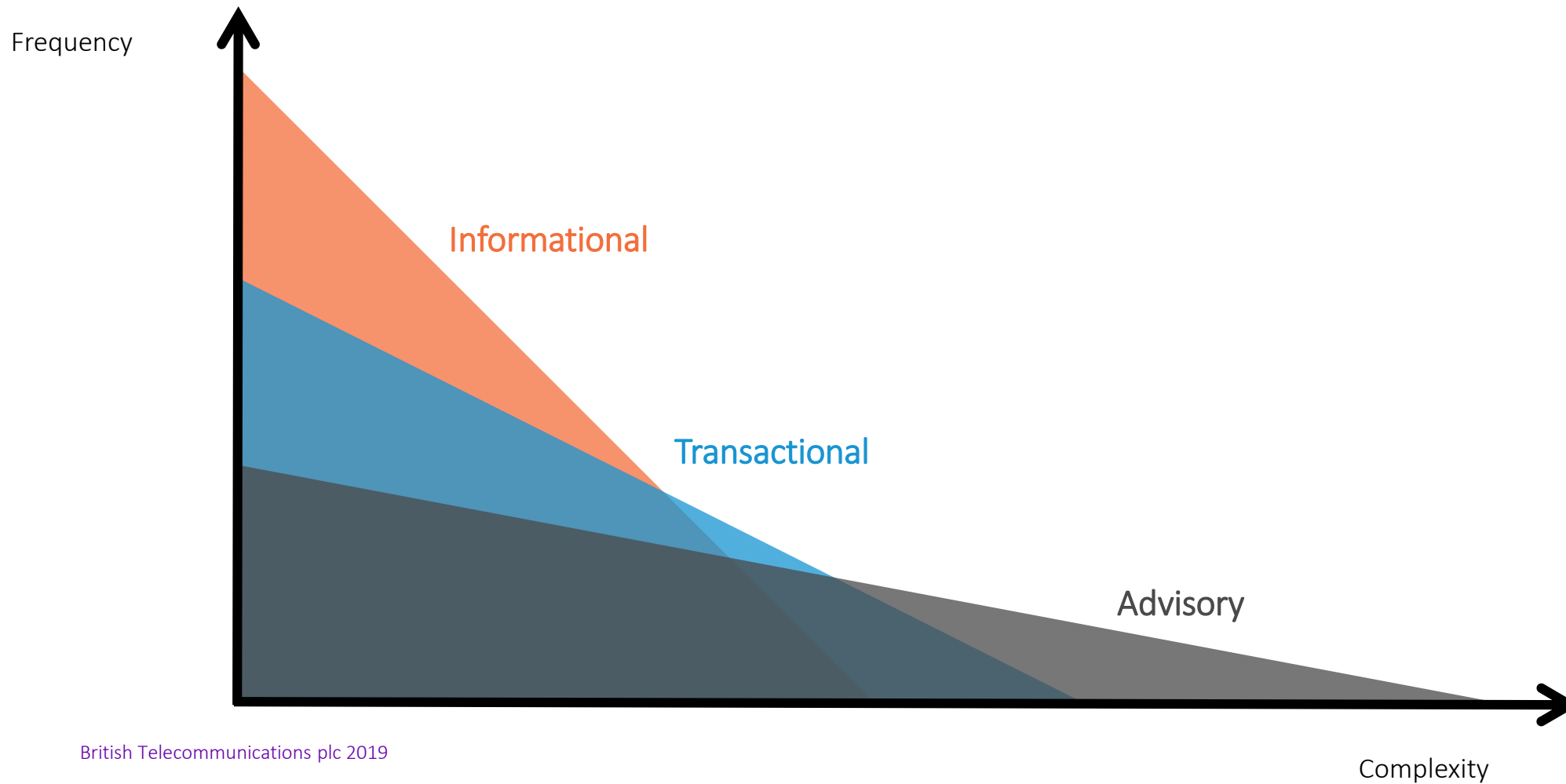
Transactional

Advisory

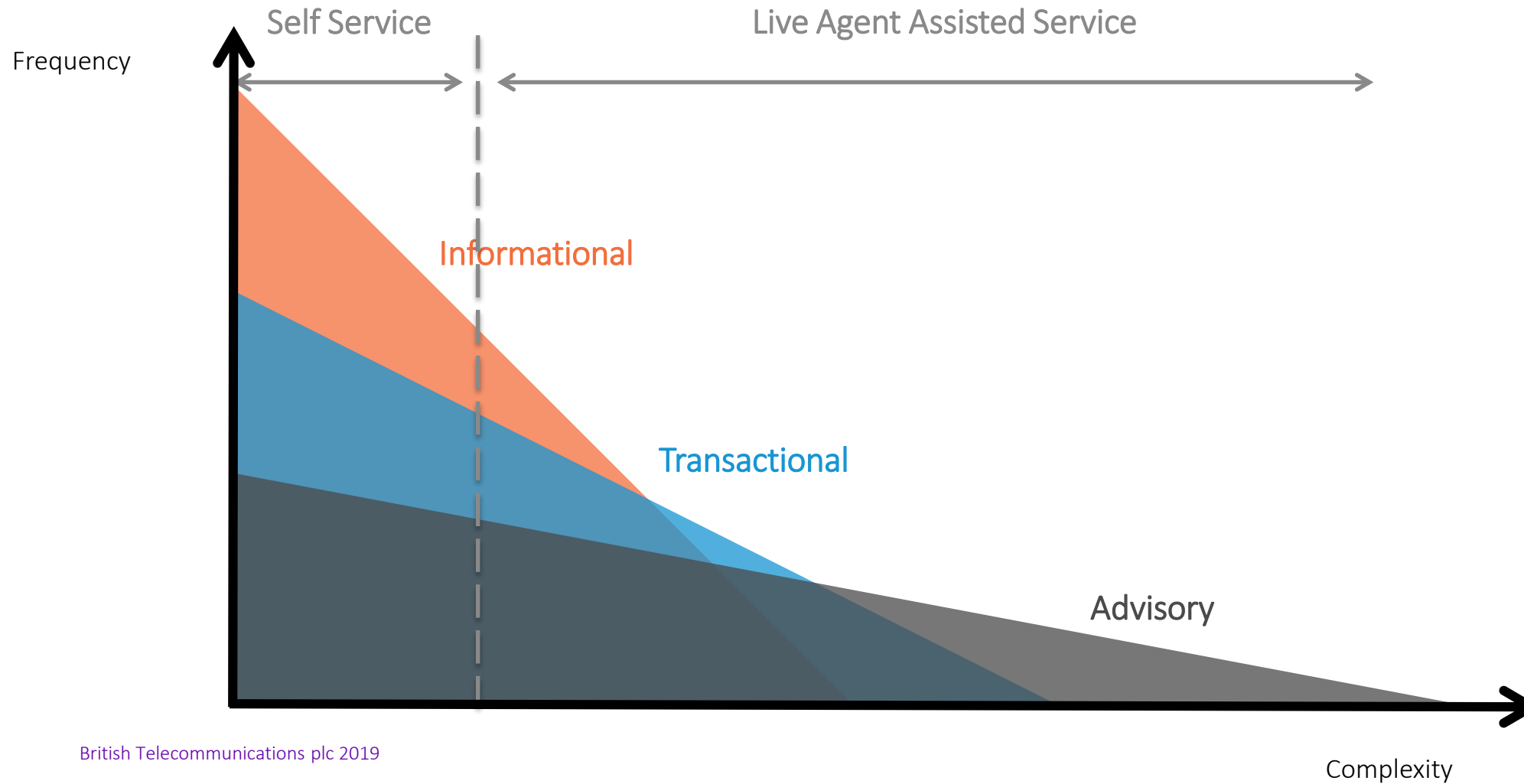


Informational

Typical Frequency Distribution of Contact Types



Typical Frequency Distribution of Contact Types



Unique capabilities



Knowledgebase Foundation

Built on single right response Knowledgebase with NLP and machine learning capabilities to support users in their own language



BOT Platform – Plug & Play Architecture

Flexibility to also connect 3rd party intent engines to increase flexibility, accuracy and future proof the solution



Seamless Escalation to CSRs

seamless that provides the full context to the agent ensuring an optimized consumer and agent experience



Multiple Sources & Channels

Uses pre-approved information from existing content, business systems, and trusted external sources and offer consistency across channels



Flexible Decisioning

Flexible decision engine to trigger escalation, ensuring right intent and source is used in order to provide best response



Machine Learning to Optimize Content

Optimizes manually and auto-generated content via supervised and unsupervised learning mechanisms



Thank you!

