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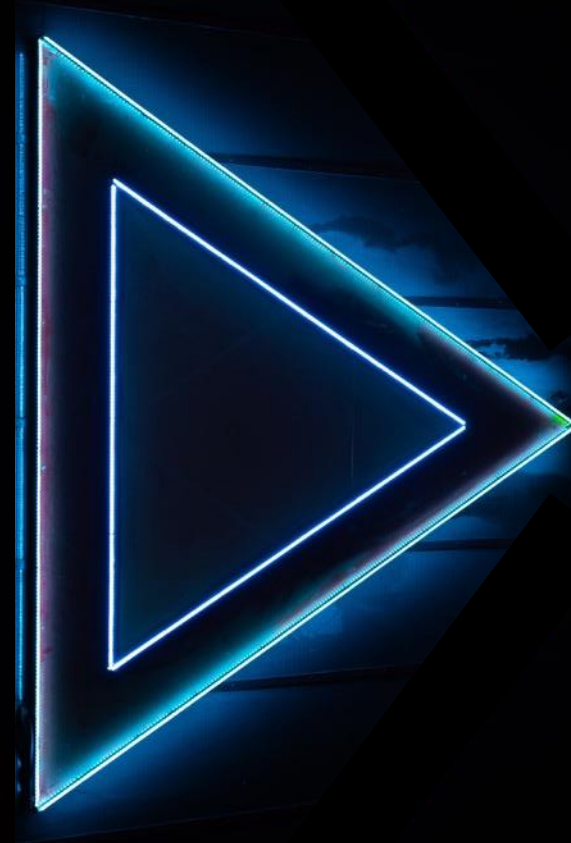
*today*

- 1. Introduction**
- 2. Virtual workforce solutions**
- 3. Apps for operational users**
- 4. Data-driven insight**

# Growth trajectory

2017

Cloud-scaled RPA



Today

Industrialised innovation factory

**70+**

Solutions built  
and deployed

**50m+**

Items & cases  
processed

**3m**

People hours  
saved

**Unlimited**

Virtual  
workforce



# 1. Applications built for operational users

**Example: 01**

# Bundle Builder

## Context

Customers can appeal the claim amount they are awarded.

A tribunal rules on the award.

A mass of documentation takes resource and time:

- 1 per day
- 100k per year



# Outcomes

**1,000+**

Colleagues  
supported

**287k+**

Digital  
bundles

**187k+**

Operational  
hours saved

**26**

Benefit areas  
onboarded

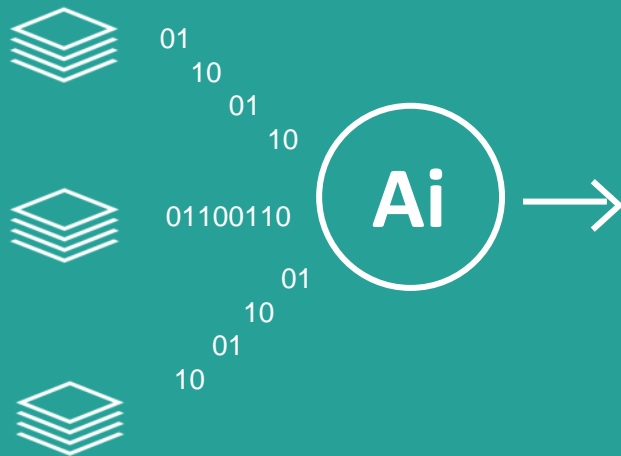
**16m**

Sheets of paper  
saved

**1,900**

Trees  
saved

# AI reads, recognises and curates 1000s of documents



**Bundle Builder** Government activity

Delete bundle Customer Name: Francesca Ashton Business Area: Personal Independence Payment Appeal Type: New Claim Complete bundle

< Back to editing Standard Redacted Harmful Redacted and harmful Key events

1/5 95%

## TEST DATA

### Key events

22/04/2022  
Page 1-2  
The recipient of child maintenance received a letter from the Child Maintenance Service (CMS) asking for proof of the payer's gross weekly income)

23/04/2022  
Page 5  
The Secretary of State issued a letter to Mr xxxxxx requesting evidence of his current income (see pages 9 to 12).

23/04/2022  
Page 6-7  
Mr xxxxxx was first contacted by the Secretary of State following Miss xxxxxx's application for child maintenance (see pages 3 to 7).

24/04/2022  
Page 3  
The CMS calculated Jon Doe's child maintenance obligation based on his annual gross income and the date the child(ren) were born.

25/04/2022  
Page 5  
The Child Maintenance Service (CMS) sent a letter to xxxxx informing him that he had been named in an application by xxxxxx.



# 2. Data-driven Insight



# Analysis and insight at scale

**24 million**

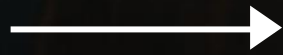
Per year

**8 million**

Miscellaneous aka white mail



Greater risk of failing to help our most vulnerable claimants in time.



**Detect vulnerable claimants.**

**And ...**

**Understand what claimants are writing to us about**

We will process **22k** documents a day to detect vulnerable claimants and attain insight in real-time.

# How?



Able to "read" hand-written and typed text from documents in **real time @scale** (~22K letters per day).



Implemented Large Language Models (Gen AI) for Vulnerable claimants detection & generation of insights.



Scales to demand and only incurs cost when being used



Use of AI, model bias and security controls all reviewed and DWP approved.



Fully DWP Security approved solution



Collaboration with **Digital Channels** team


Solution **LIVE**

# Employment Support Allowance (ESA) Online

Improving an existing solution with a Large Language Model



How do  
you improve  
an efficient  
service?



## Today:

- Live since July 2020
- 735,000 cases processed
- 40,000 hours saved

## But

Medical conditions entered as free text in ESA claims, must map correctly to medical conditions maintained by DWP.

Only **35%** accuracy so agents update **65%** of the cases manually.

## And ...

Time consuming and frustrating for agents

# For example ...

## Medical condition entered by Claimant

## Incorrect mapping from fuzzy matching

## Correct mapping using Large Language model

Chronic fatigue

Chronic renal failure

Fatigue

Chronic fatigue syndrome

Chronic renal failure

CFS (Chronic Fatigue Syndrome)\*

Complex PTSD

Coma

Post- traumatic stress disorder\*

High blood pressure

High Cholesterol

Blood Pressure

Torn rotator cuff (repair)

Termination of Pregnancy

Rotator cuff injury or syndrome

Severe asthma

Severe hypertension

Asthma

Partial amputation of foot

Partial sight

Amputation part only foot



**So far ...**

**Accuracy has increased**

From

**35%**



To

**87%**

**And ...**

**15,000 cases processed in last 10 days.**

**Solution live since 13/02**