



# Just add TRUST

*Authenticate, Verify, and Transact.*

## The Problem:

“The Internet was built without an **identity layer**.”

**Kim Cameron, Microsoft:**  
inventor of the concept of user-centric identity



## This has resulted in:

- Massive amounts of fraud
- No idea who you are dealing with
- Children accessing restricted sites
- A complete loss of trust online



## Identity is a target for scammers

- Identity fraud cases reach all time high as cost-of-living crisis bites
- Latest fraudscape report shows cases of ID fraud rose by nearly a quarter in 2022
- ID fraud now accounts for almost 70% of cases filed to the National Fraud Database
- The latest Cifas research reveals ID fraud is now one of the biggest threats to the UK public.



- We have developed technology to:
- 

- Beat the scammers
- Protect children - verify age
- Add trust to online transactions

**But how do we do this?**

## Avoco's starting point is:

**38+ million** verified users in the UK and More than **500 million** globally.

This is the **largest global group** of verified users.

It achieves this reach using **Open Banking** and **Premium Banking** APIs

It is built from the technology developed and **successfully deployed** for **UK Government services**.

**Deployed, tried and tested** by Banks and a global Identity company.

The product is now **ready to launch!**

## Avoco connects data across global identity ecosystems



Billions of Bank, Amazon, Apple, Google, Government etc. IDs can be uplifted through the use of Avoco's technology.

This creates the missing verified identity layer for the internet and online transactions.

Revolut





**The whole is greater than the sum of the parts**

## Avoco Team

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The Avoco team are internationally respected experts in digital identity for consumers and citizens. Over the past 20 years, the Avoco team members have contributed to the identity industry through various endeavours.

Avoco has been reappointed to the role of expert advisers to the Scottish Government for Digital Identity.

Avoco's team have been involved in industry groups, such as the Kantara Initiative and as stewards for Identity Commons, helping design protocols and standards.

Avoco's team has all been instrumental in delivering mass-adopted consumer identity systems for the UK government.

The team work together closely, each having expertise in software design and development, consumer-centric systems, protocols, cybersecurity, encryption, UI/UX design and accessibility, software architecture, business models, and partnerships and networking.

# Avoco Key Team Members



The Scottish Government's Digital Identity Programme Director, Trudy Nicolson, said:  
We need a thorough understanding of technological considerations and options and Avoco's expertise in this area will be invaluable.



## Sandy Porter (Founder)

CEO, Business Development,  
Evangelist, Human Network  
Specialist

30 years industry experience

<https://www.linkedin.com/in/sandy-porter/>

Sandy was part of the UK team that designed the UK Government Verify system and also a board director of the Information Card Foundation alongside Eric Sachs of Google, Kim Cameron of Microsoft, Andrew Nash of PayPal, Mary Ruddy of Gartner and Ben Lawrie of Google.



## Susan Morrow (Founder)

Head of Product and  
R&D, Technologist, Futurist, Tech  
Strategist, Tech Writer

25 years industry experience

<https://www.linkedin.com/in/susiemorrow/>

Susan is recognised as one of the most influential women in UK tech by Computer Weekly for 2020, 2021, 2022, and 2023; she was shortlisted in "100 Women in Tech". Susan advises the Government conference "Think Digital Partners."



## Alex Porter

CTO - Technologist, Solution  
Architect, SaaS Expert

15 years industry experience

<https://www.linkedin.com/in/alex-p-91893438/>

Alex worked with Microsoft to analyse their information card identity system and security check the UK Government's "identity hub."

He has extensive experience in deploying solutions to Azure, AWS and on-premise.



## Dr. Steve Hitchen

Security Architect and Security,  
Protocol and Standards Expert

30 years industry experience

<https://www.linkedin.com/in/steve-hitchen-6a425837/>

Steve worked with Microsoft to analyse their information card identity. This included in depth code reviews of the Microsoft Geneva codebase. He was also undertook security checks the UK Government's "identity hub."

Steve has extensive experience in designing solutions and encryption.



# There is a massive market and opportunity

THALES

&  
AVOCO  
secure

## Market for the services include:

**Government** – Central Government Identity services, Local Government, Companies House, HMRC, TISA, MOD, DWP, HMPO, Pensions dashboard, Right to Work, DBS, Right to Rent.

**Private Sector** – Banks, Ticketing, Accommodation, Financial Services, Age Verification, Retail...

**Wallets** - The EU and Apple are developing wallet capability that can use these services.

**Thales** (the largest global identity group) are working with **Avoco** and have now signed a formal **partner agreement**.

# Validation of Avoco from the market

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Analyst **Kuppingercole** rated Avoco as **Outstanding** in Identity Attribute Collection.

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**Scottish Government** use Avoco as **trusted** advisors on their citizen identity project.

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**Thales** the largest Global Identity Company **partners** with **Avoco**

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**Thales** along with **two major UK banks** used **Avoco technology** to prove the use of banking data for identity verification.

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In the **UK Gov SFA** project, Avoco was chosen by **all bidding consortiums** for the tender.

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**Avoco** provided the **technology platforms for the** Royal Mail and Citizensafe **GOV.UK Verify Scheme** solutions.

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**Kuppingercole** rank **Avoco** as a **leading challenger** in the **global identity verification market**



A large blue circle containing the text "Avoco's Bank Pilot Project" in white. There are also two smaller blue semi-circles, one in the top left and one in the bottom right of the slide.

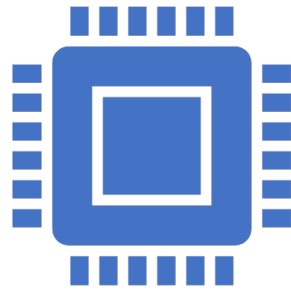
# Avoco's Bank Pilot Project

## Avoco working with Thales and two major UK banks

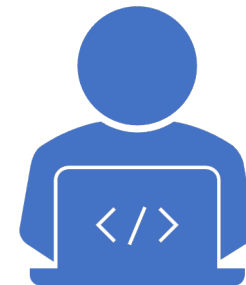
- 15+ million users live
- Integrated with the two banks new customer data APIs to provide **65+ verified data attributes** from each bank
- **Thales working with Avoco aim to extend this solution globally** which will also include document scanning, sanctions checks, biometrics, open banking....

# Orchestration Decision Engine (ODE)

**Avoco is the first to deliver an engine that provides the rules to modify the behavior of a system  
This will provide the controls needed to optimize data use in global eco-systems. ODE adds  
trust to identity-driven services**

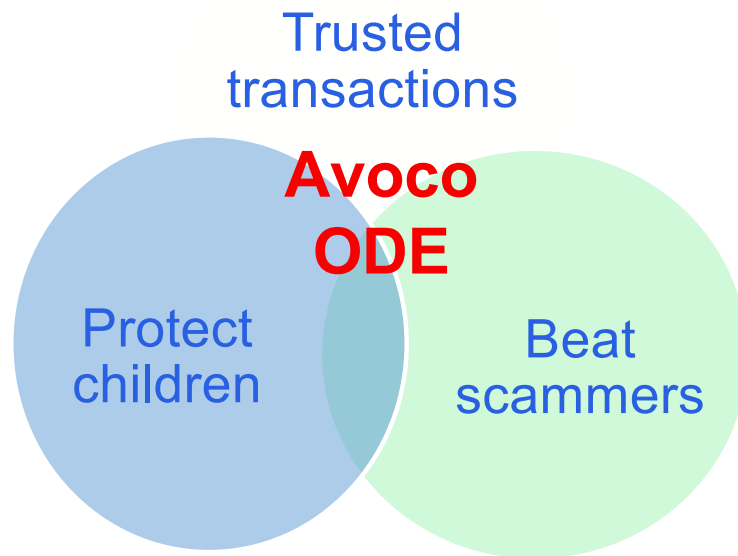


Events such as callbacks from Providers, first and second authentication, etc., may be passed to ODE for extensive data manipulation and system processing options.



This affords administrators unparalleled options to control the behaviour of the system and manipulate data, without changing core code.

# Avoco's Orchestration and Decisioning Engine (ODE)



Avoco has a suite of APIs that provides the functionality through an ODE that delivers the missing layer:

- **Services** users use are **verified**.
- **Users** are **verified**.
- Reusing existing verified data from **trusted sources** like a bank adds **trust** to online transactions.
- It enables a **secure, seamless** and **low friction** experience.
- **Authenticate, Verify** and then **Transact** is the basis of every transaction.

***Authenticate, Verify, and Transact.***

# Example use cases supported using Avoco ODE

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## **Trus-T**

- ✓ facilitates assured and trusted identity transactions based on orchestration and decisioning, e.g., citizen identity for accessing government services

## **AgePass**

- ✓ Uses open banking data to issue age over/age under wallet passes to Apple or Google wallets (or other ID apps)

## **In-action transactions**

- ✓ Performs anti-fraud checks during an online transaction

***Authenticate, Verify, and Transact.***



## Example use cases



# Creating **Trusted** transactions for **Banks**

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### Cross boarder

Authenticate and share Know Your Customer verified data from a London bank account to create a Paris, New York etc. account



### Internal

Share verified data for new accounts and products



### External

Authenticate and share data with a bank's customers



### Card present equivalent

Enable an online service to be sure the customer that is ordering an item is linked to the bank account or card and the address is verified.

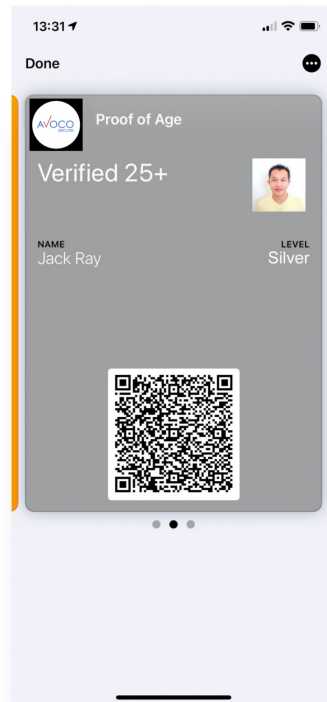
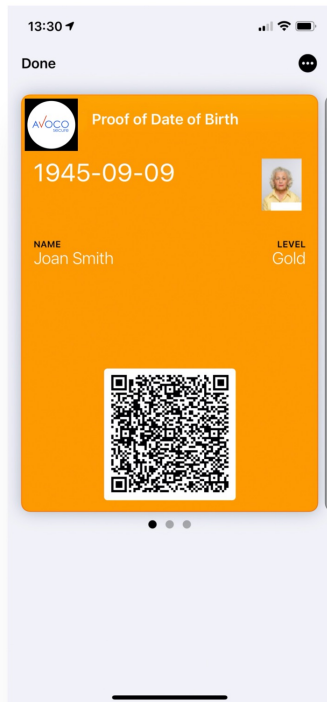
***Authenticate, Verify, and Transact.***

# Age over pass for iPhone and Google wallets

**The use case connects event websites with customers and open banking to issue an age over pass to an existing mobile wallet.**

- Avoco pass issuer integrated with online event organizer
- Customers buy event tickets, but must prove they are over 18 at the event entrance
- During online purchase, customer is offered the ability to have an 'over 18' pass issued to their Apple or Google wallet. They are asked to login to their bank to verify their age.
- The customer is redirected via Avoco to the login page of their bank
- On successful login, the DOB data is seamlessly transformed to an age over pass, the DOB data being deleted automatically to preserve privacy
- The customer receives an email containing the pass, which they save to a wallet of their choice.

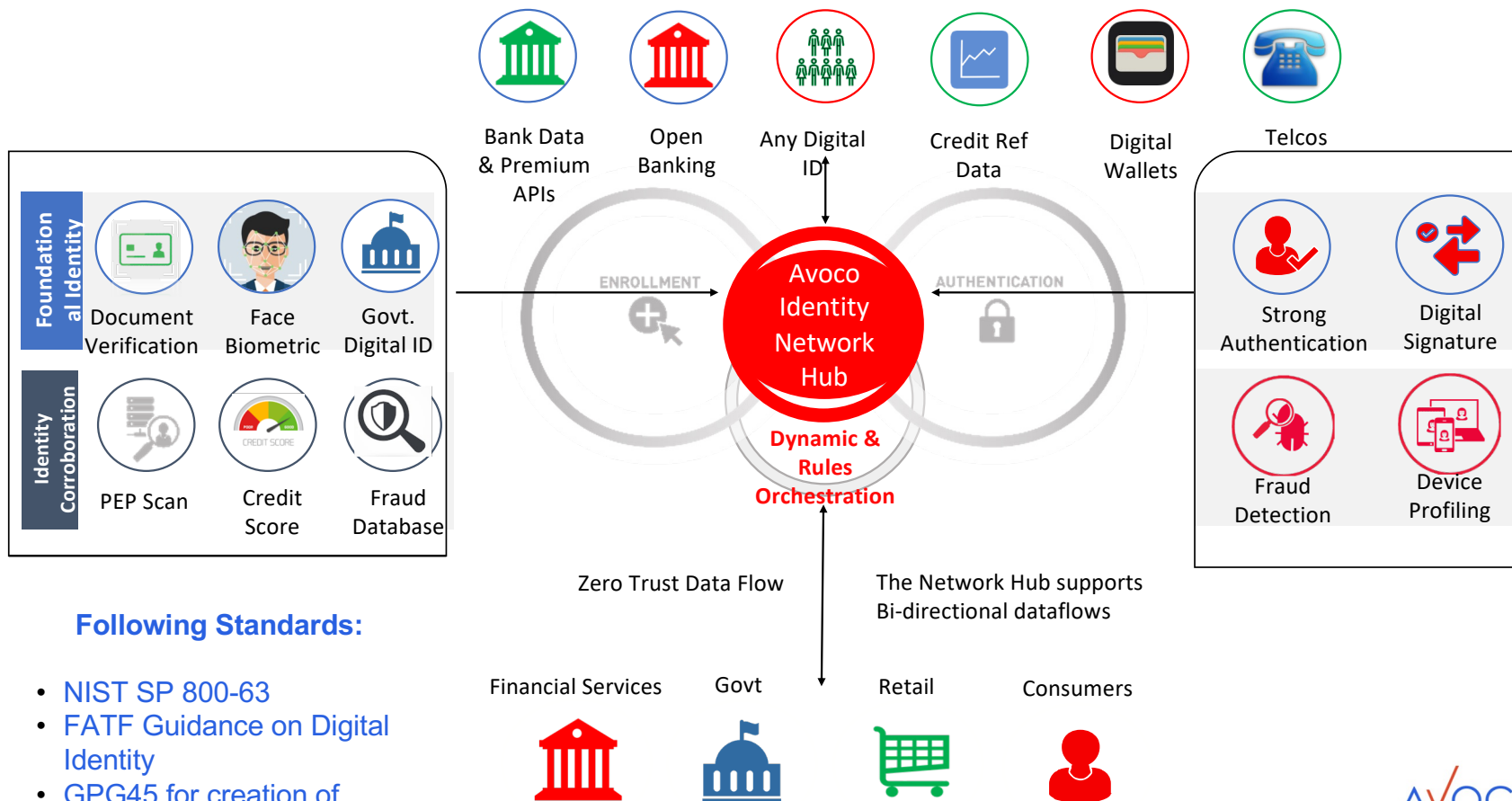




## AgePass

- Uses open banking data
- Obfuscates DOB and generates age over or age under
- An Apple/Android Pass can be issued: for example, age, passport, address, or even that you have a verified Bank account
- EU, SSI, cloud, desktop, mobile, Avoco, proprietary protocol wallets can all be supported

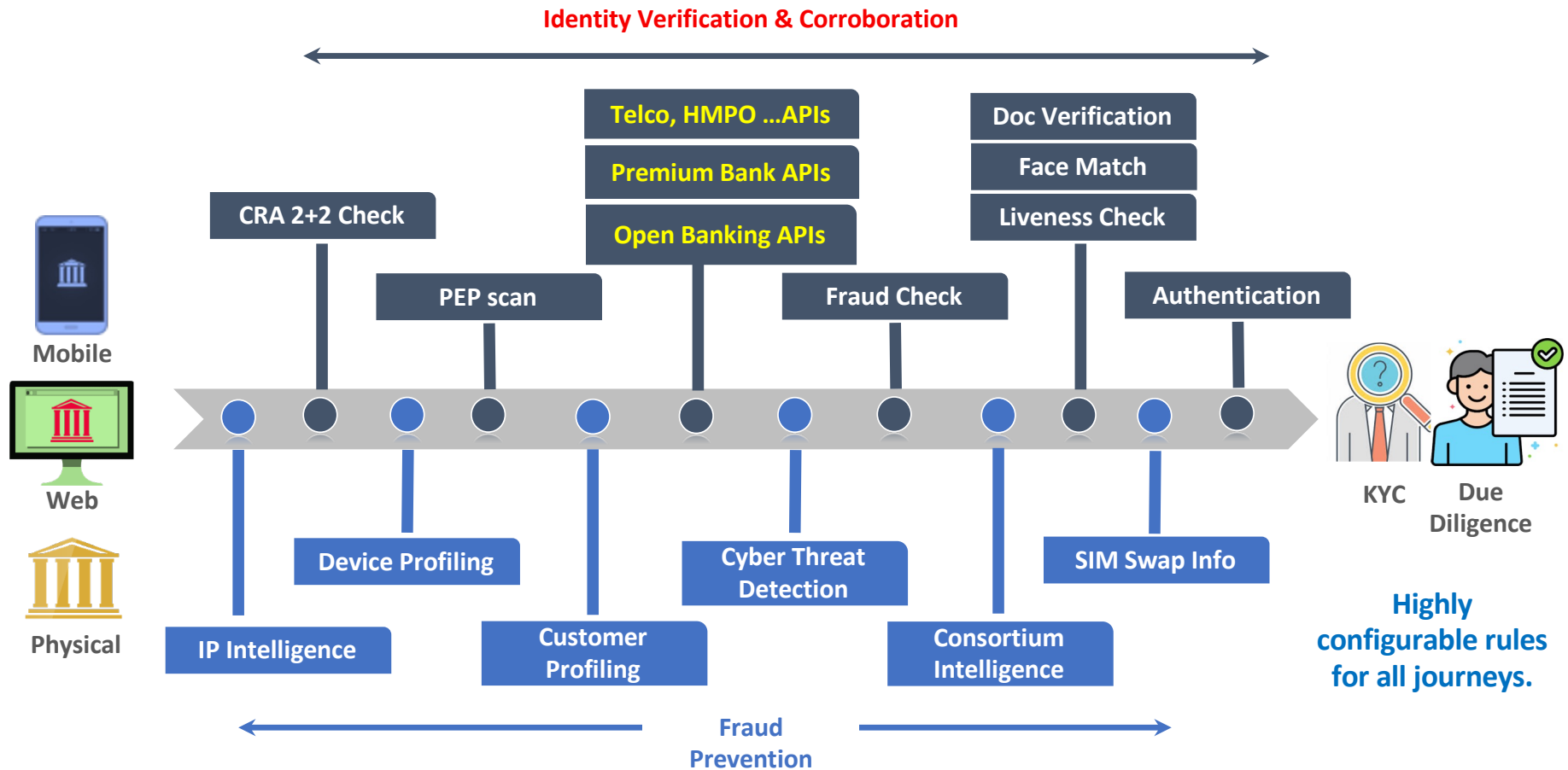
# Under the hood: How ODE connects verification, data, and AI-driven services to build trust



## Following Standards:

- NIST SP 800-63
- FATF Guidance on Digital Identity
- GPG45 for creation of Identity assurance levels
- FAPI

# Avoco ODE showing flexibility in handling KYC and CDD



# Fundamentals of ODE: behavior modification scripts

ODE controls and manages identity transactions and issues AgePass by applying granular script-based rules

01

Dynamic

02

Per transaction

03

Easy to apply  
and update by  
system admin

04

RP can initiate  
a rule

05

Data provider  
(e.g., bank) can  
restrict use of  
data via rules



**Keep it  
simple...**

**Just add TRUST....**

The real power is not just with Banking  
and Verified data but how this is  
delivered and translated.

*.... Authenticate – Verify – Transact*