

2023-24

# CMSE11585 Fintech Infrastructures and Innovation

Envisioning a FinTech Product
Group presentation

Team 1









# Agenda

Help is needed

Our Fintech Vision

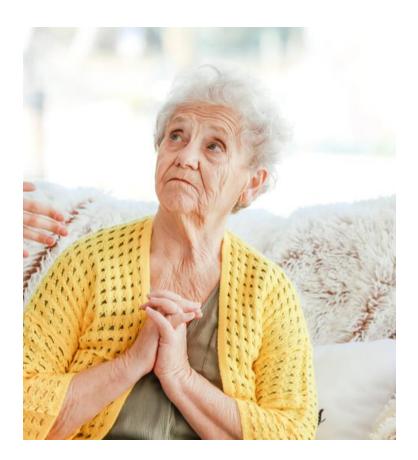
**Functionalities** 

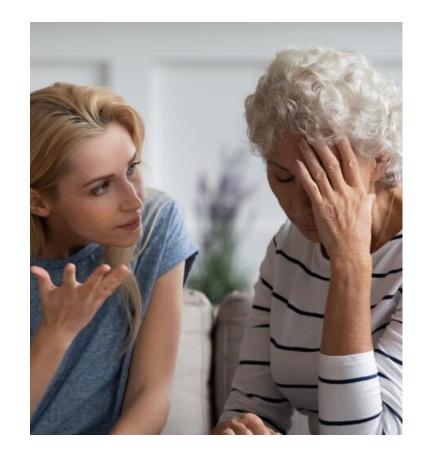
Infrastructure

**Implications** 

Conclusion







# They need us

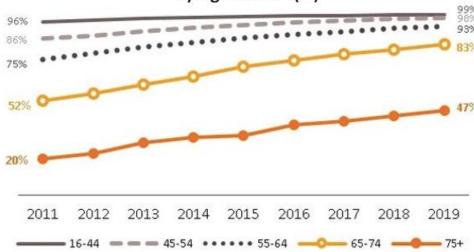
They deserve financial wellbeing and inclusion

### Vulnerable and targeted



### They adopt but distrust and misuse tech.

Percentage of the UK Population Who Use the Internet, by Age Cohort (%)



Source: UK Office of National Statistics, Krungri Research

- 85% of elders targeted
- Five million people in UK
- **157** elderly victims a day
- £1.2 million pounds each day
- Lost: £580 million in 2023 (first 6 months)
- Information is under reported

### Left alone and this is costly



Left alone, out of the game

**Need protection and guidance** 

And there's more... what happens when they leave?

- **Funerals**: £900 4,184, 200/Month unattended.
- Loneliness: No relatives to be traced.
- **Unclaimed estates** total: £1,744,435,300
- **Probates:** £2,750- £11,000 + Vat
- Inheritance **tax** (40%), executors.
- Intestacy: for heirs: £9,700 (lost of known assets).



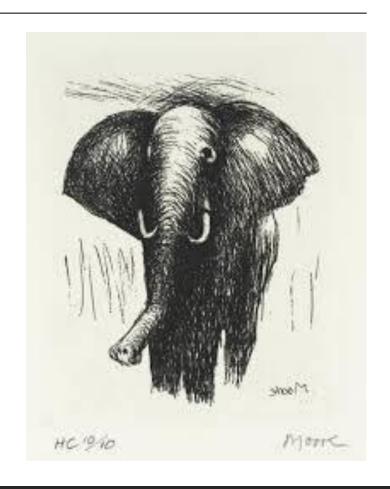




### They need our help, we need to tackle

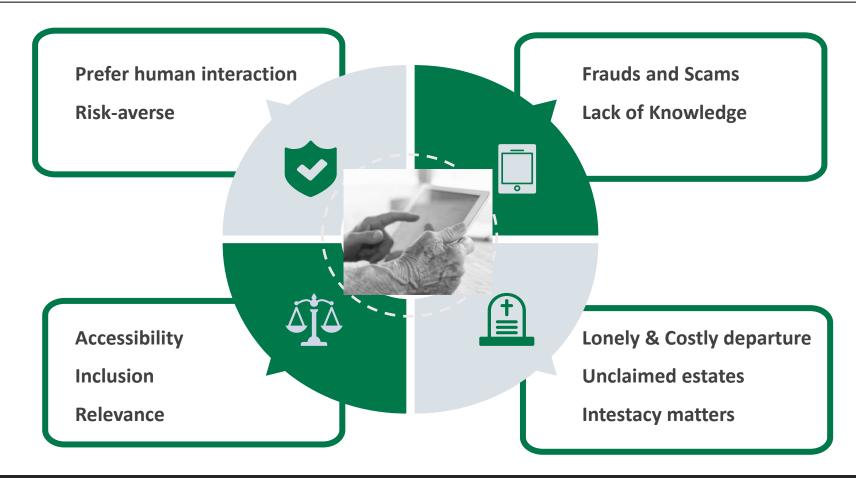
### 4 main Tasks:

- Order their assets and debts
- Make a Will
- Prepare their Exit (FS)
- Manage what they leave



# They need us

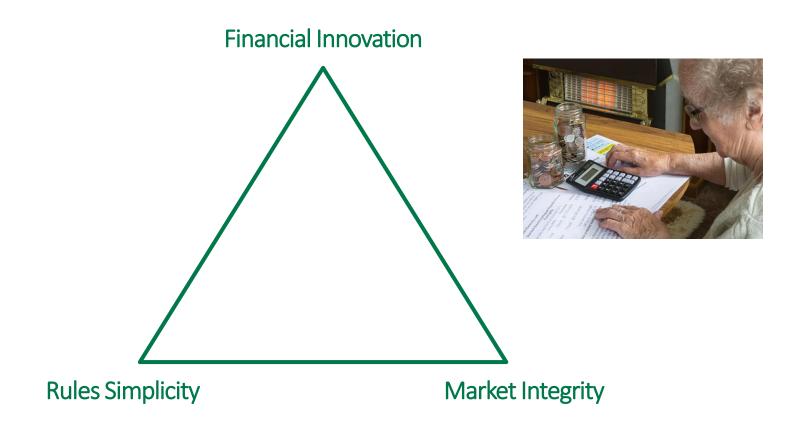




- Financial innovation has 'locked out' elders
- Lack of inclusion & knowledge
- Intangibility of financial services
- Insecure financial transactions
- Lack of options and freedom

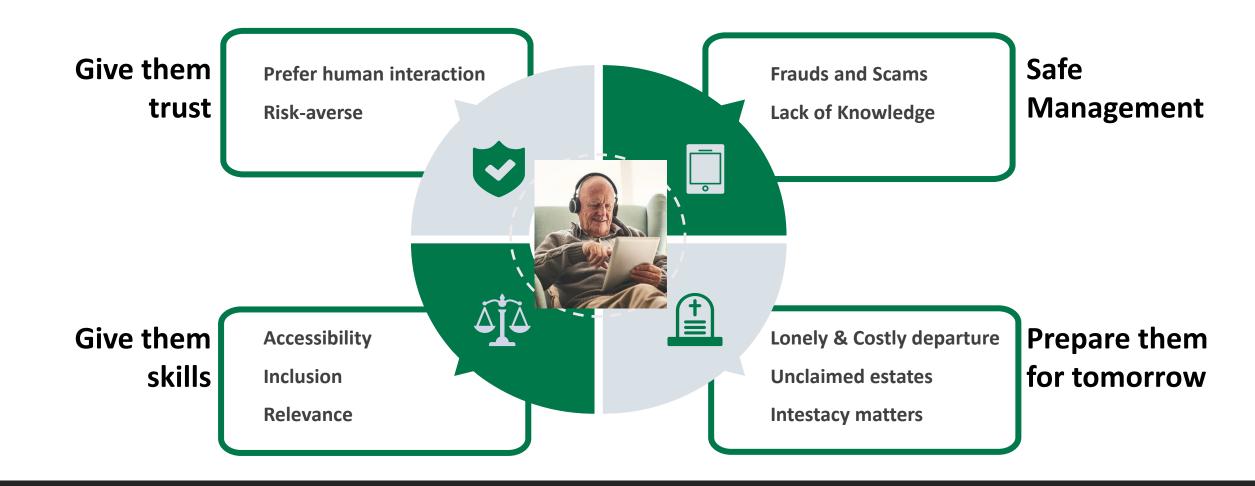


# In Sum...





# Aim for the roots...



# How can we help?...



### Our Fintech Solution

- Al-powered companion for the seniors
- Knowledge for the seniors
- More safe transactions
- Funeral planning
- Legacy protocols





## Objectives



Give them Knowledge



Al Trustee companion

Simple financial management

**More Protected** 



Personal certified

**Smart contract** 

Security seals: Relatives + Legal Tutors + Institutions

Plan their Legacy



Smart contract legacy protection

Trustee will be their trustee after they leave

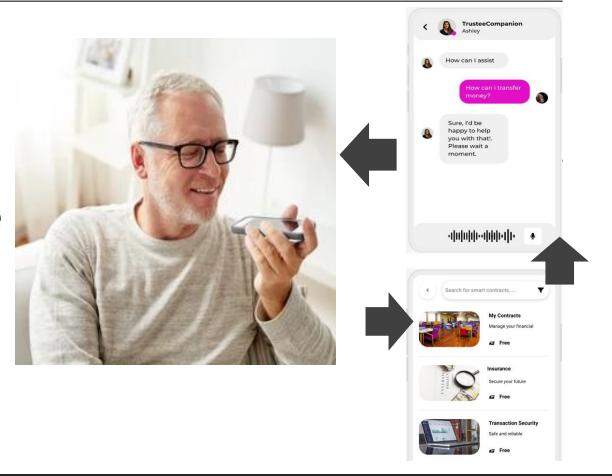
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### Artificial Intelligence Companion



- Al powered Chatbot
- Learns from the user
- Uses Trustee Knowledge Base
- Speech to text

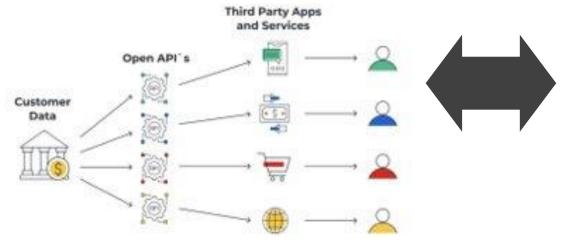
(better for those elders with worse eyesight)

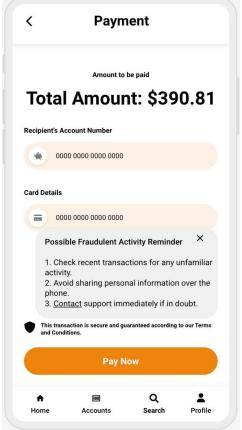


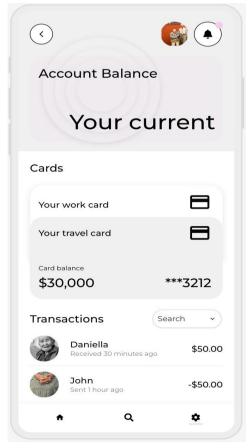
### Simple financial management



- Personalized Dashboard
- Secured transaction through
   Open Banking API

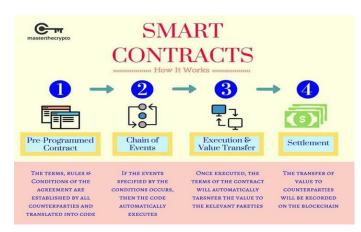






### Legacy financial protocol

- Signed through smart contract
- Stored by **blockchain** network
- Sreehari et al. (2017): Tamper-proof, safe, and transparent wills







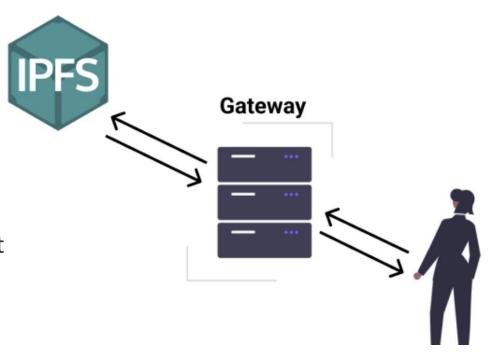




### Data Storage By IPFS



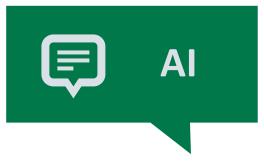
- IPFS (InterPlanetary File System)
- Decentralized and Distributed File
   System
- Three steps:
  - 1. IPFS Hash Generation
  - 2. Storing IPFS hash in **Ethereum** Smart Contract
  - **3.** Accessing Data from IPFS



# Infrastructure

### Traditional





#### Advantages:

- High efficiency
- Access 24/7

#### **Disadvantages:**

Misleading conversation
 when elders cannot talk or
 write clearly



#### Advantages:

- Enhanced Security
- Simplified transaction

#### **Disadvantages:**

Regulatory uncertainty

**Problem**: How to check the validity of the will after death



#### Advantages:

- Real-time Transactions
- Cost Efficiency

#### **Disadvantages:**

- User Familiarity
- Dependency on Banks

# Infrastructure

### Non - conventional





#### Advantages:

- Physical presence
- Building trust

#### **Disadvantages:**

- Access during office hours
- Insecurity
- Corruption



#### **Advantages:**

- Order
- Less complex
- Less Costly

#### **Disadvantages:**

- Regulatory issues
- Need for online hosting



#### **Advantages:**

- Elders recover relevance
- Cost Efficiency

#### **Disadvantages:**

- Enforcement through regulation
- Data privacy

# Implications



- **Lower costs** for everyone
- Financial inclusion and well-being
- Engage elders in technological advances
- Create trust for elders
- Provide safer electronic financial transactions
- Give more knowledge on what they have
- Let them leave a legacy, not a new issue.



"Leverage innovation for social gain"



Let's give our elders knowledge, safety and certainty.

We will help them know what they have, use it wisely and protect their legacy.

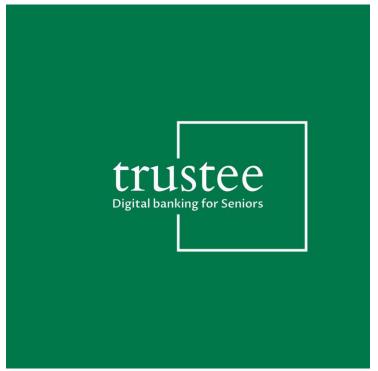




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# Thank you



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