**ITU**Events

FIG FINANCIAL INCLUSION GLOBAL INITIATIVE





22-24 January 2019 Cairo, Egypt

#financialinclusion



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#### Organized by

Committee on Payments and Market Infrastructures









## Element, Inc: Al-Driven Digital Identity for Financial Inclusion

Barbara Iyayi

**Chief Growth Officer & Managing Director for Africa** 

#### **QUICK WARM-UP**



#### **Total WW Smartphone Users (billions)**

2008 2013 2018

0.24 1.5 2.5+

## **1B+ New Smartphone Users**

in 5 years

#### **QUICK WARM-UP**



#### **UN World Population Prospects 2017 Revision (billions)**

	2017	2050
World	7.55	9.77
Asia	4.50	5.26
Africa	1.26	2.53

2.0B of 2.2B

Total Population Growth = Asia + Africa

#### **PROBLEM**



- (1) The World is Becoming Mobile Device-Led
- (2) Addressing the Identity Needs of Large Populations

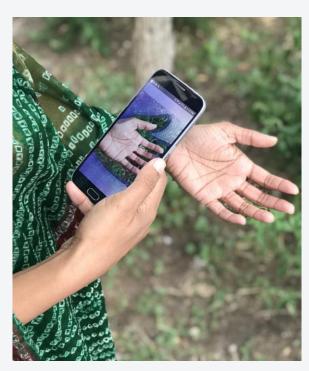
is Critical to Addressing the Planet's Greatest

**Challenges Over the Next 3 Decades** 

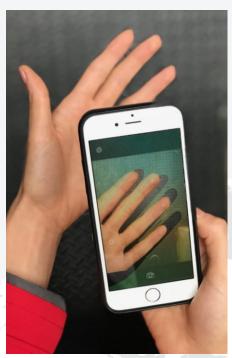
This is why we formed Element

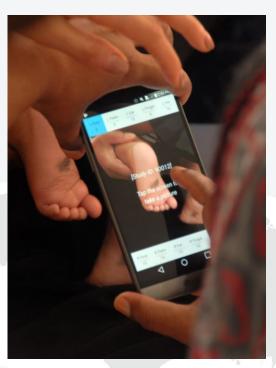
### **SOLUTION**











**Palm** 

**Face** 

**Fingerprints** 

Infant Biometrics

## **Delivering Digital Identity**









Yann Lecun
CO-FOUNDER, CHIEF SCIENCE ADVISOR

Developed Modern Al Field

One of the **first modern** Al research labs, the **first** focused on **digital identity** 

# Why AI?







## Al-powered Mobile Software

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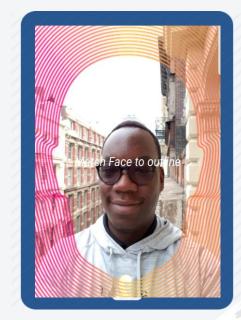




Element is a unique mobile software-only solution for biometric recognition



Uses existing camera on **mobile devices** – no specialized hardware.



**Deep Learning** algorithms create a unique **user model**, allowing for authentication **without storing underlying images.** 



User models act as a key to unlock access at any customer touchpoint such as ATM, mobile/online banking platform, debit card, etc.

#### **SOLUTION**



- PERFORMANCE: 1 in 200,000 FAR (4x Apple TouchID)
- PORTABILITY: CROSS-DEVICE / NO PHONE OWNERSHIP

SECURITY ARCHITECTURE: NO IDENTIFIABLE DATA

OFFLINE: ENROLL + ID LOCAL TO DEVICE

**IDENTIFICATION: 1-N MATCHING**