DIGITAL IDENTITY

TRENDS AND INNOVATION

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APRIL 2019
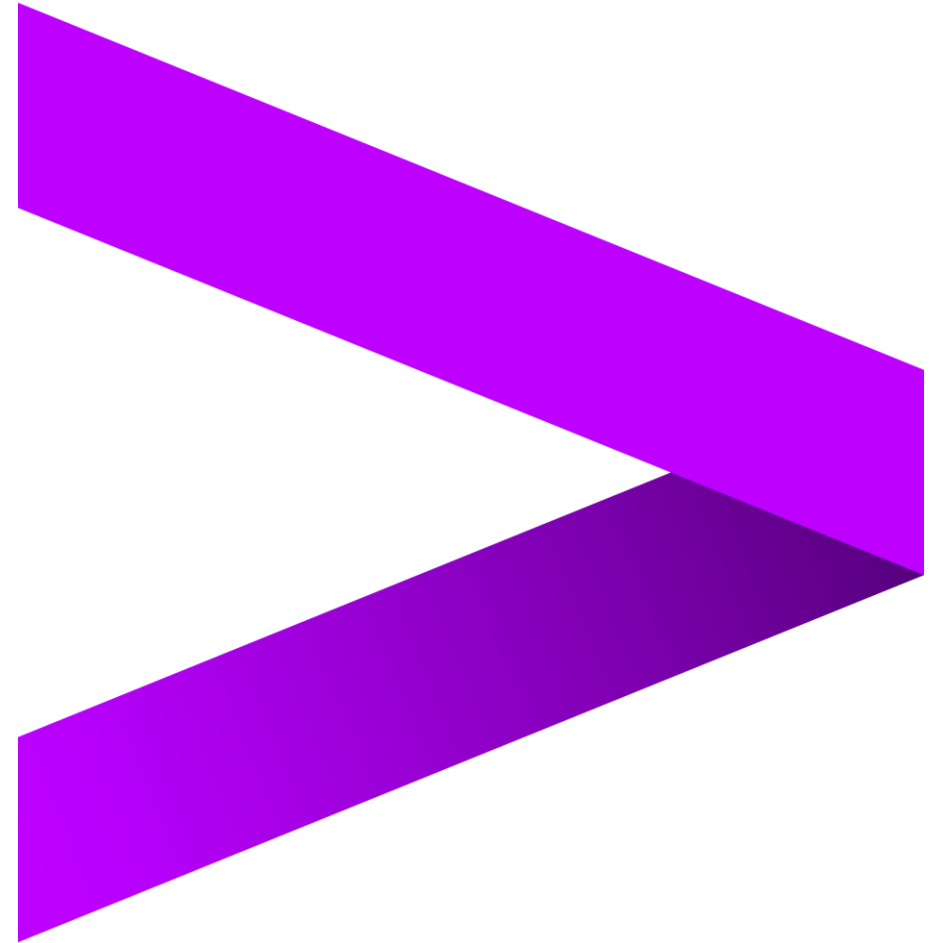
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IDENTITY IN EVERYDAY LIFE

People	Private Sector	Public Sector	Connected Devices	'Things'	Virtual entities
Employment background checks	Banking & insurance e.g. KYC	Getting an ID e.g. driving license	Social benefits & welfare	Goods in supply chain	Social Media
Healthcare services	Making payments	Paying & collecting taxes	Trade finance	Forests & Wildlife tracking	Workforce mgmt.
Border control	Telecom	Travel & hospitality	Paying & collecting taxes	Processes	Machine to machine

IDENTITY TRENDS: WHERE THE WORLD IS GOING

HUMAN CENTRIC & PERSONALIZATION

SEAMLESS USER EXPERIENCE

MOBILE DEVICES EVERYWHERE

BLOCKCHAIN IS THE DISRUPTOR

HUMAN AT THE CENTER

SELF MANAGED/ OWNED IDENTITY

SECURITY & PRIVACY

AI & ROBOTS

BIOMETRIC IS EVERYWHERE
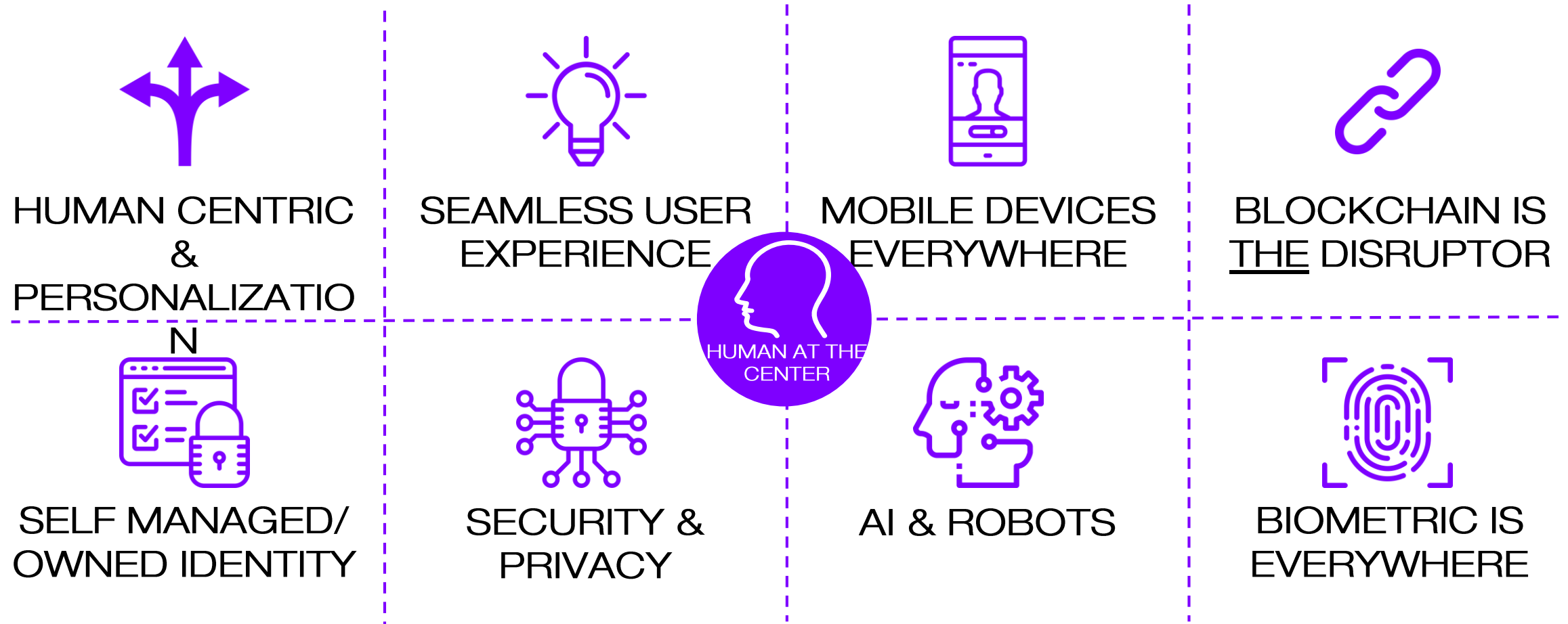
IDENTITY IN THE DIGITAL WORLD NEEDS TO BE: USER-CENTRIC

USEFUL

INCLUSIVE

SECURE

OFFERS CHOICE

FIT FOR PURPOSE

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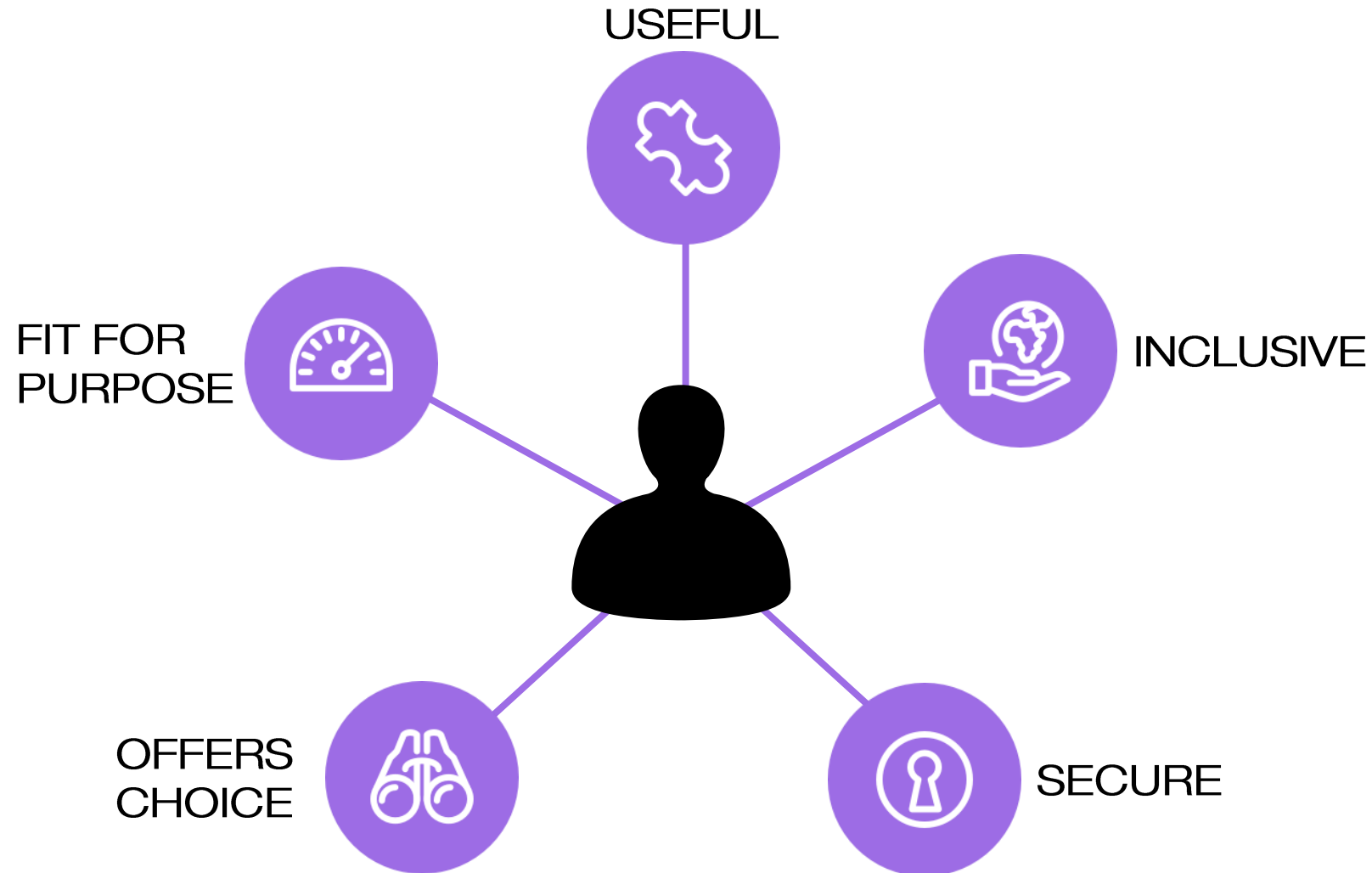
MAKING A DIGITAL IDENTITY USEFUL

TRUST & TRUST ANCHOR EVOLUTION
For the refugee, a trusted digital identity means an acknowledgement of existence and the right to transact, and must be considered in light of evolving trust anchors.

USER-CENTRIC DESIGN
A digital identity must provide true value and utility to its user, while also safeguarding rights and protecting against harm – especially for the most vulnerable populations.
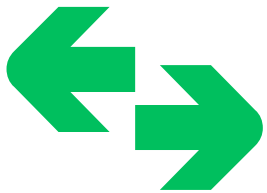
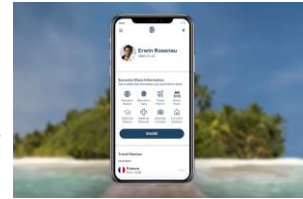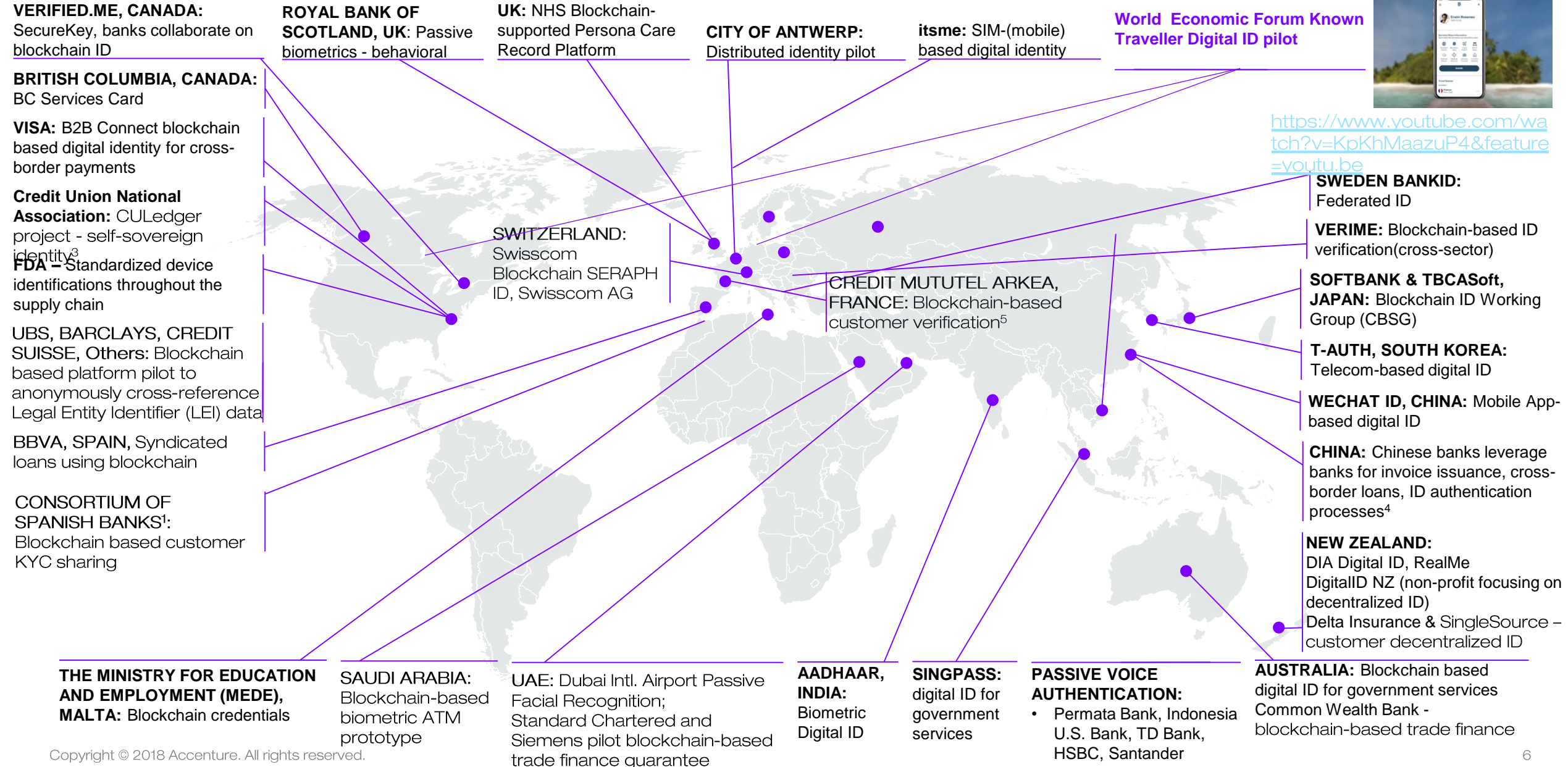## CROSS-BORDER, CROSS-SECTOR
For a digital identity to provide value, it must be useful as the person transacts across borders and sectors, – especially for those who are displaced and for whom the digital identity is their only trusted form of identification. This means public and private sectors must cooperate.

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INNOVATION IN IDENTITY ACROSS THE GLOBE

Non-Exhaustive

VERIFIED.ME, CANADA: SecureKey, banks collaborate on blockchain ID

BRITISH COLUMBIA, CANADA: BC Services Card

VISA: B2B Connect blockchain based digital identity for cross-border payments

Credit Union National Association: CULedger project - self-sovereign identity[3]

FDA – Standardized device identifications throughout the supply chain

UBS, BARCLAYS, CREDIT SUISSE, Others: Blockchain based platform pilot to anonymously cross-reference Legal Entity Identifier (LEI) data

BBVA, SPAIN, Syndicated loans using blockchain

CONSORTIUM OF SPANISH BANKS[1]: Blockchain based customer KYC sharing

ROYAL BANK OF SCOTLAND, UK: Passive biometrics - behavioral

SWITZERLAND: Swisscom Blockchain SERAPH ID, Swisscom AG

UK: NHS Blockchain-supported Persona Care Record Platform

CITY OF ANTWERP: Distributed identity pilot

CREDIT MUTUTEL ARKEA, FRANCE: Blockchain-based customer verification[5]

itsme: SIM-(mobile) based digital identity

World Economic Forum Known Traveller Digital ID pilot

https://www.youtube.com/watch?v=KpKhMaazuP4&feature=youtu.be

SWEDEN BANKID: Federated ID

VERIME: Blockchain-based ID verification(cross-sector)

SOFTBANK & TBCASoft, JAPAN: Blockchain ID Working Group (CBSG)

T-AUTH, SOUTH KOREA: Telecom-based digital ID

WECHAT ID, CHINA: Mobile App-based digital ID

CHINA: Chinese banks leverage banks for invoice issuance, cross-border loans, ID authentication processes[4]

NEW ZEALAND: DIA Digital ID, RealMe DigitalID NZ (non-profit focusing on decentralized ID) Delta Insurance & SingleSource – customer decentralized ID

THE MINISTRY FOR EDUCATION AND EMPLOYMENT (MEDE), MALTA: Blockchain credentials

SAUDI ARABIA: Blockchain-based biometric ATM prototype

UAE: Dubai Intl. Airport Passive Facial Recognition; Standard Chartered and Siemens pilot blockchain-based trade finance guarantee

AADHAAR, INDIA: Biometric Digital ID

SINGPASS: digital ID for government services

PASSIVE VOICE AUTHENTICATION:
• Permata Bank, Indonesia U.S. Bank, TD Bank, HSBC, Santander

AUSTRALIA: Blockchain based digital ID for government services Common Wealth Bank - blockchain-based trade finance

CROSS-SECTOR COLLABORATION: A COLLABORATIVE ECOSYSTEM IS CRITICAL

TRUST & ETHICS

INTEROPERABILITY

GOVERNMENTS

TRUST

GROWTH

END USER VALUE

NGOS

PRIVATE SECTOR

INTER-OPERATE

ENABLEMENT

STANDARDS & REGULATIONS

ID2020

Today, approximately one-sixth of the world's population lives without an officially recognized identity.

ID2020 is a public-private consortium promoting the UN 2030 Sustainable Development Goal of providing a unique digital legal identity for everyone on the planet through a technology-forward approach that will leverage secure and well-established systems.

The project aims to help individuals such as refugees prove who they are in order to gain access to basic services such as education and healthcare.

The new platform will connect existing record-keeping systems of commercial and public entities through blockchain, allowing users to access their personal information wherever they are, and to present their IDs via an app on their smartphones or devices.
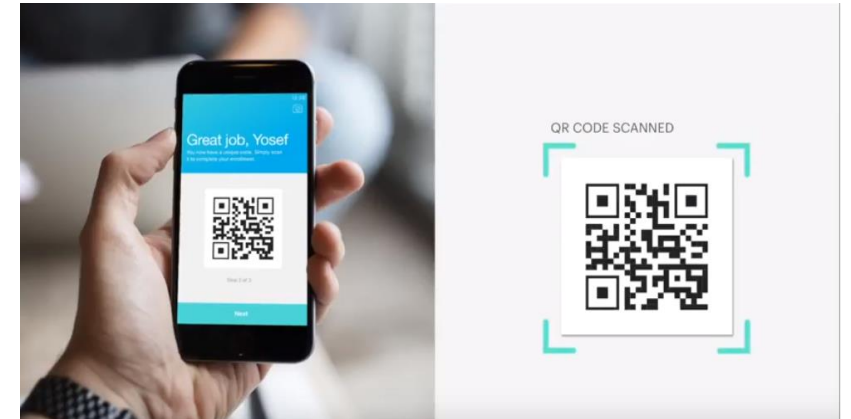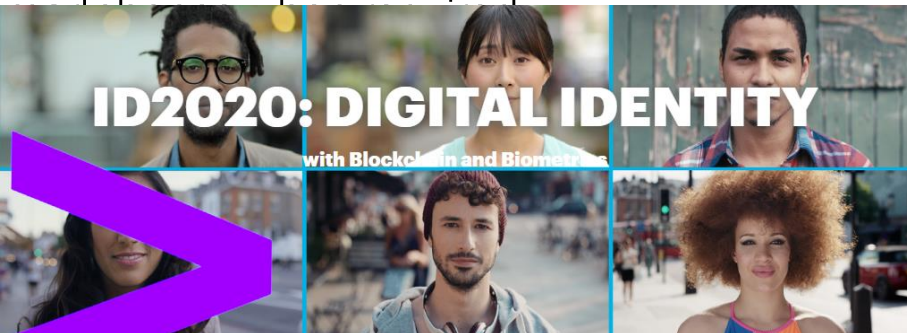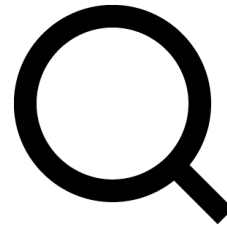
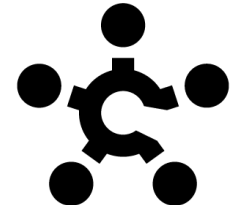# BLOCKCHAIN ENABLES DECENTRALIZED IDENTITY THROUGH TRUST

Trust

Secure
Data is cryptographically secure – sensitive data can be locked down

Tamper-Evident
Built-in mechanisms to verify data has not been changed – information cannot be altered

Distributed
Participants have access to the same data – real-time updates and information

WHY IS DECENTRALIZED IDENTITY RELEVANT

FOR THE USER:

PORTABLE
Users can take their identity data with them

USER EXPERIENCE
Reduce amount of repeated input

ACCURATE
Data shared more accurately and consistently

PRIVATE
User is in control of what to share, and with whom

FOR ORGANIZATIONS:

EFFICIENCY
Decrease dependence on manual processes

VERIFIABLE
Data can be easily verified and shared confidentially

TRUST & INTEROPERABILITY
No need for direct trust relationships

COMPLIANCE
Immutability and auditability of blockchain

REDUCE RISK
Index of data persists; don't share info if not required

DIGITAL IDENTITY IS KEY TO FINANCIAL INCLUSION

Financial Inclusion

Financial inclusion efforts seek to ensure that all households and businesses, regardless of income level, have access to and can effectively use the appropriate financial services they need to improve their lives. (CGAP)

Key Statistics

> Globally, $2B Adults have no bank account
> Financial Inclusion is most lacking in the Middle East and Sub-Saharan Africa
> Gender is also a strong factor in Financial Inclusion
> Financial Inclusion represents a large market opportunity for global financial institutions

Identity is key to financial inclusion by enabling trust

DECENTRALIZED IDENTITY
CIRCULAR SUPPLY CHAIN

VIDEO: https://youtu.be/bkvxYkeh71E

EXAMPLE USE CASES

HEALTHCARE RECORDS: Enables patients to share and manage their own health records so that they can easily get healthcare services and prescriptions anywhere

STREAMLINED KYC: accelerate the KYC process with client consent through attestations from network of banks

BACKGROUND CHECKS & TRAINING RECORDS: Reduce repetition in background checks & build trusted records of education and professional certificates

PROOF OF OWNERSHIP / INSURANCE: attestations of property ownership, for instance, used to get insurance or file taxes

THANK YOU