



# Digital Innovation Dialogue

## Session 8: Farmers' digital identity and data ownership

Monday, 2 March  
14:30-16:00

Lebanon Room, D209 and online

Digital Innovation Unit | Information Technology Division (CIO)

*8<sup>th</sup> Digital Innovation Dialogue - 2 March 2020*

*FAO IT division - Digital Innovation - Erik van Ingen*

*FAO Sub regional Office for Eastern Africa - Kafkas Caprazli*

*FAO IT division - Kenya - Stuart Tippins*





general

little  
low hanging  
fruit

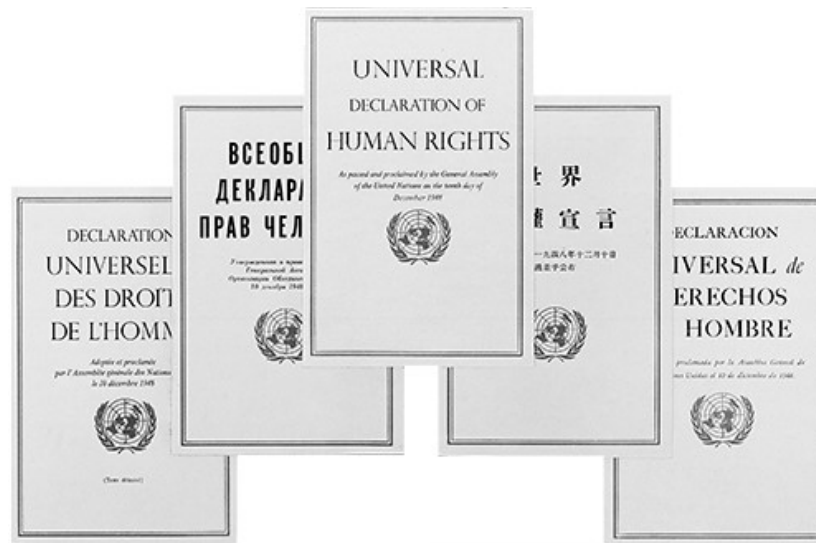
long term

foundational





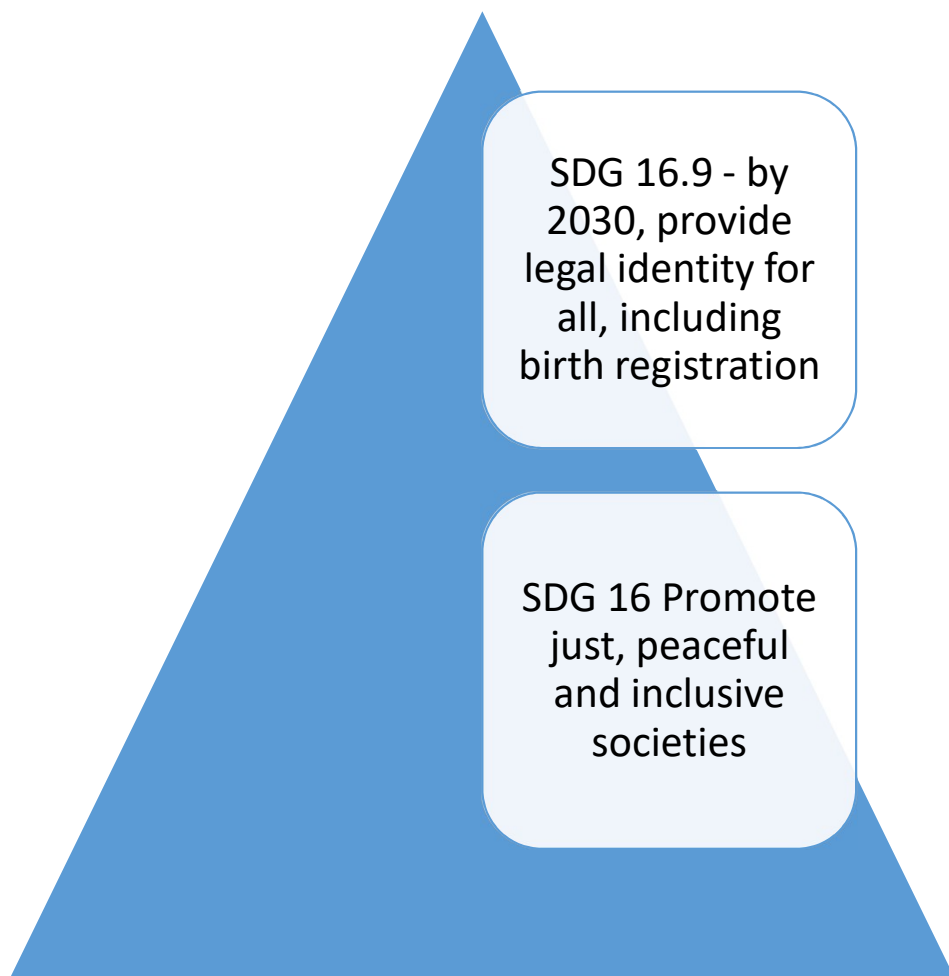
# Universal Declaration of Human Rights 1948



International Covenant Civil Political Rights  
1 - 1976                      2 - 1989



SDG 16.9 - id4Africa - AU  
*(on behalf of Kafkas Caprazli)*



## UN Legal Identity Expert Group (UN LIEG):

- coordinated UN position and approach for implementation
- strengthened evidence for action
- enhanced high-level advocacy and engagement
- technical support and financing country implementation

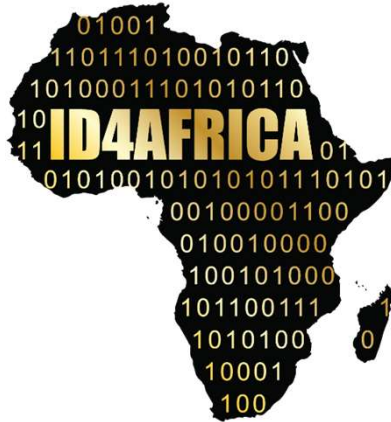
<https://unstats.un.org/legal-identity-agenda>

# African Union (AU)

the African passport and free movement of people

*(AU Flagship Project of Agenda 2063)*

<https://au.int/en/agenda2063/flagship-projects>



6th annual meeting  
Marrakesh  
June 2-4, 2020

premier event on id  
for development  
purposes

1500+ registered  
identity stakeholders  
(in 2019)

<https://www.id4africaevents.com/2020>



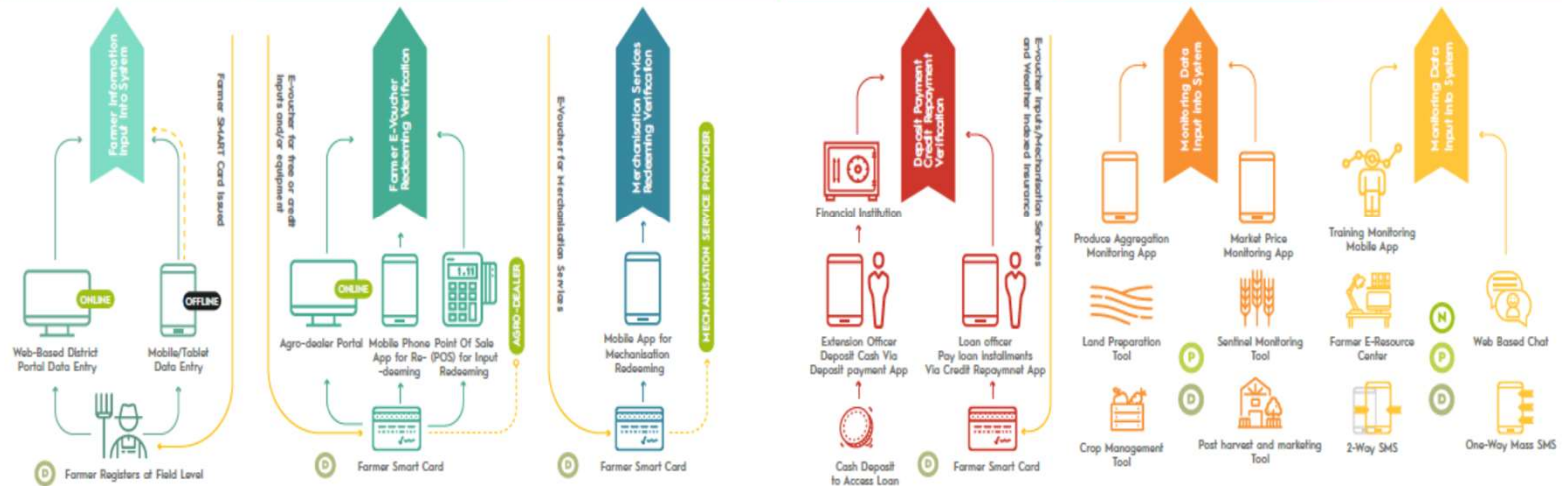
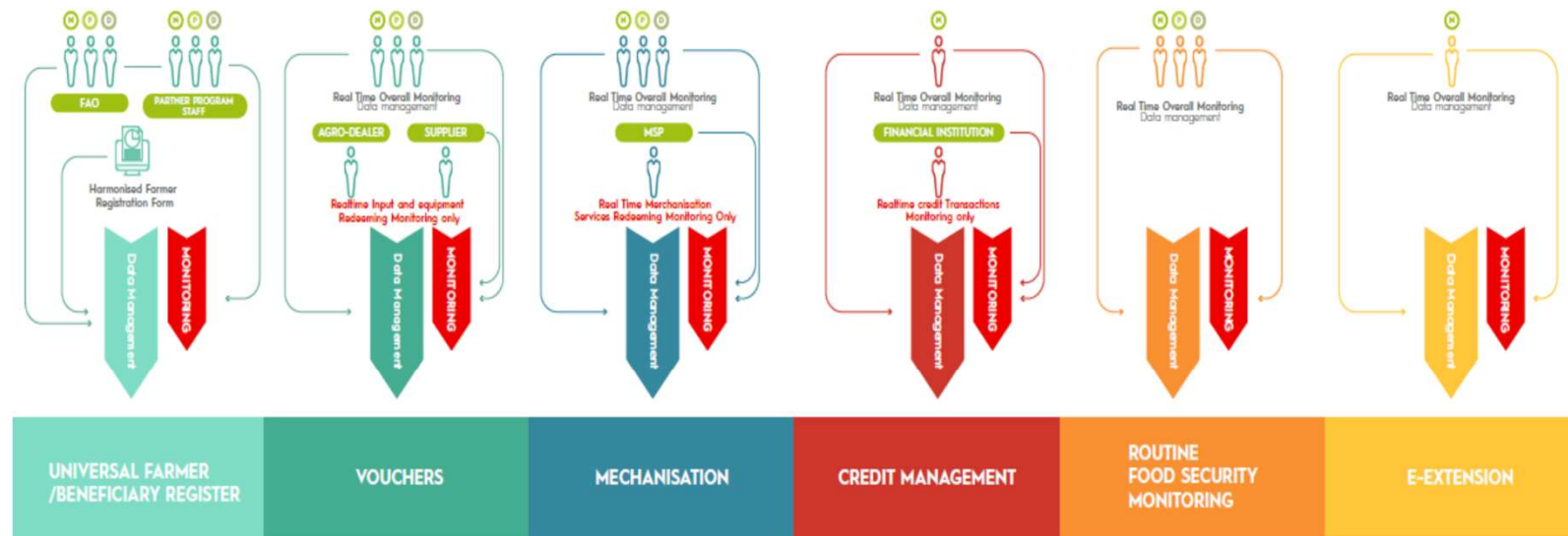


KIAMIS

*(on behalf of Stuart Tippins)*

# KIAMIS

Kenya  
Integrated  
Agriculture  
Management  
Information  
System



KEY: N National Level System Access P Provincial Level System Access D District Level System Access MSP Mechanical Service Provider

# KIAMIS

*Kenya  
Integrated  
Agriculture  
Management  
Information  
System*

Farmer Digital Identify provides value added services:

- inputs management
- credit management
- mechanization services

# KIAMIS – Farmer Digital Identity and Data Ownership

## **Advantages:**

Fully owned by government for greater sustainability, policy control and accountability of managing citizens data:

- Farmers registration data collected by government designated officials
- open to all levels of national and county officials – especially important after recent highly publicised scandals surrounding AG inputs allocation and distribution

## **Disadvantages:**

- Not registering on KIAMIS prevents farmer receiving government provided inputs
- Kenya does not currently have specific data protection legislation, which would regulate the collection, retrieval, processing, storing, use and disclosure of personal data
- Kenya's High Court halts controversial biometric citizen ID scheme (Hudma) until new data protection laws are enacted

<https://www.bbc.com/news/amp/world-africa-51324954>



GDPR

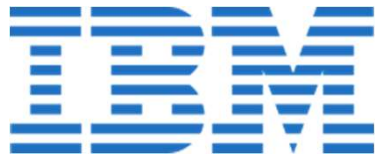


*EU*

***General  
Data  
Protection  
Regulation***

*2016 adopted  
2018 into force*





describes GDPR as  
one of the “biggest  
shakeups” for the  
industry



we are GDPR  
compliant by the  
effective date of 25  
may 2018



Microsoft

new capabilities to  
enable robust  
GDPR compliance



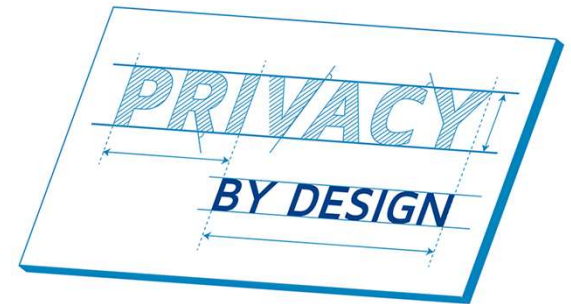
GDPR & blockchain

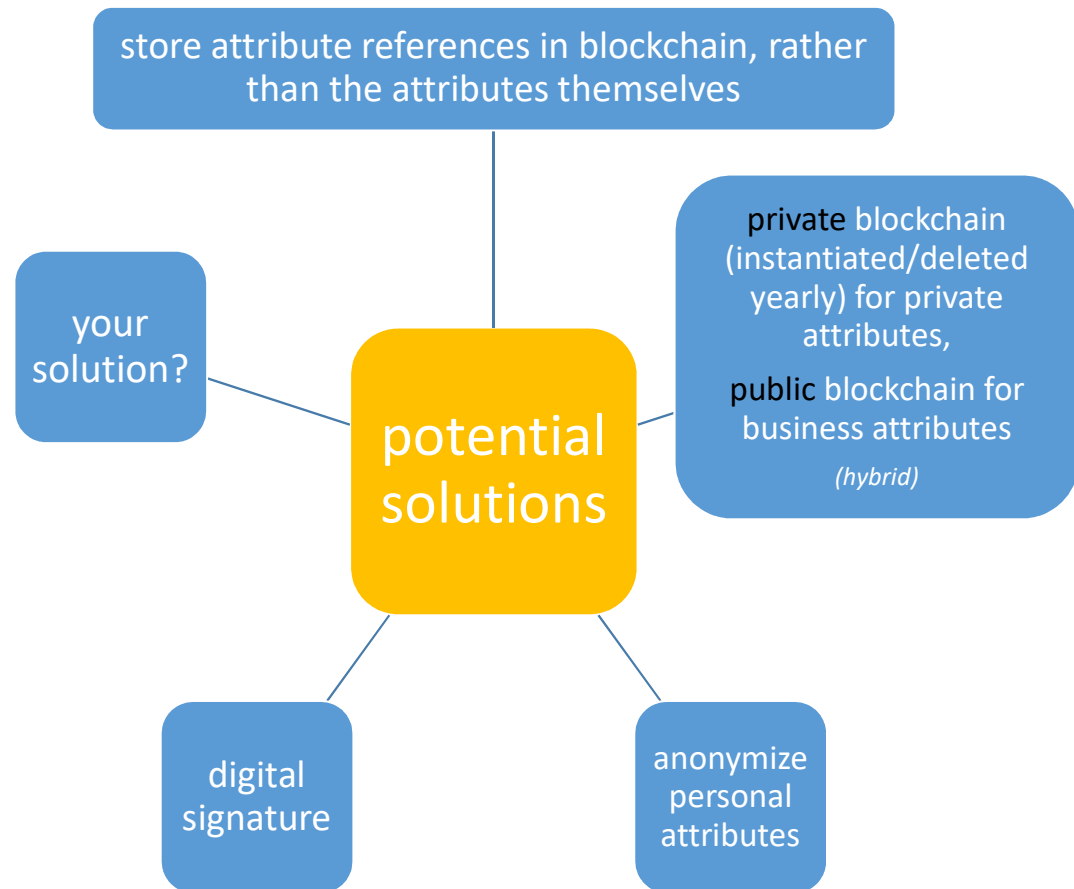
# Blockchain GDPR Problem Statement

***GDPR prescribes the right to be forgotten (10 years) and the right of data owners to delete their data. Blockchain transactions are immutable and do therefore conflict with GDPR when they contain personal data because an immutable record in blockchain cannot be deleted.***

A possible solution for this problem is not to use blockchain but a digital signature like IRMA: <https://irma.app/>

([Jacobs](#), 2020)







Value of farmer's data

# data regulation confusion matrix

company	users	\$ net worth/assets	\$ per user
ByteDance (tiktok, etc.)	800 million	78 billion	97
Facebook	2.5 billion	138 billion	55
Google	2 billion (Youtube)	131 billion	66
John Deere	>0	66 billion	>0
AGCO (Massey Ferguson, Fendt, etc.)	>0	7,1 billion	>0
etc.			

*a social network is worth  
nothing without online users*

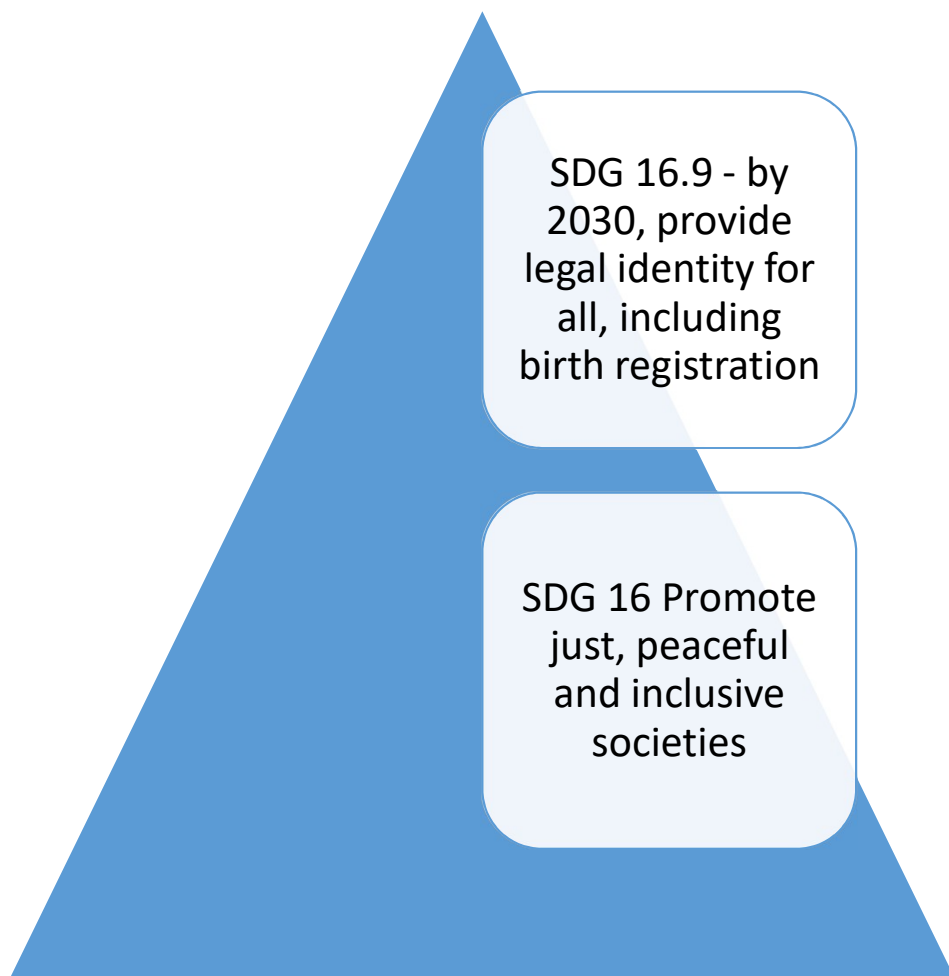
-

*this applies increasingly also  
to digital agricultural service  
providers*

*can a farmer port its data  
from one digital agriculture  
service provider to another?*

all values are approximate





## UN Legal Identity Expert Group (UN LIEG):

- coordinated UN position and approach for implementation
- strengthened evidence for action
- enhanced high-level advocacy and engagement
- technical support and financing country implementation

<https://unstats.un.org/legal-identity-agenda>

## hypothesis

GDPR (lite?) & farm ID  
for agriculture

UN General Assembly/LIEG tasks UN  
Economic Commissions and/or FAO to  
implement GDPR & farm ID in agriculture

International Digital Council for Food and Agriculture  
takes accordingly precise role and responsibilities

from General to Agriculture Data Protection Regulation (ADPR)

## remarks

if not UN, who?

if not now, when?

standing on the shoulder of giants

thank you

Bart Jacobs

Stuart Tippins

Kafkas Caprazli

Puvan Selvanathan

Imma Subirats-Coll

Richmond Manasseh

Them bani Malapela

Nikola Trendov

Meng Zeng

Wei Liang

Bo Jia

