



HOW DATA CAN INCREASE PRODUCTIVITY

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**Anggar
Are
Bahu
Borong
Iring
Kesuk**

**Lupit
Paron
Prowolon
Rakit
Rante**

**Ru
Sangga
Tampah
Tumbak
Tumbuk
Ubin**

Anggar Kalimantan
1/33 ha

Are Bali
100m²

Bahu

Borong

Iring

Kesuk Mataraman
1/6 ha atau 1000m²

Lupit Jawa
250 ubin

Paron

Prowolon

Rakit Pantura
1000m²

Rante Sumatera
22 x 22 yard

Ru

Sangga Jawa
5 ubin = 70m²

Tampah

Tumbak Jawa Barat
3.75 x 3.75m²

Tumbuk Jambi
100m²

Ubin Nasional
Ru=tumbak

LOW PRODUCTIVITY DUE TO ASYMMETRIC INFORMATION



Paddy productivity

14.5%

Less than Vietnam
(5.7 tones per hectare)

Even lower compared to
Japan, China, South
Korea and Australia



Highest

Paddy production cost
in Asia (\$0.3 per kg)

2.5x higher than Vietnam,
1.8x higher than Thailand
1.2x higher than China



Post-harvest

Loss 20%

Of crops

Inefficient value
chain from farmer
to consumer

Source: IRRI (2016)

PROBLEMS WITH DATA



Silos



Underutilized



Quality



Costly

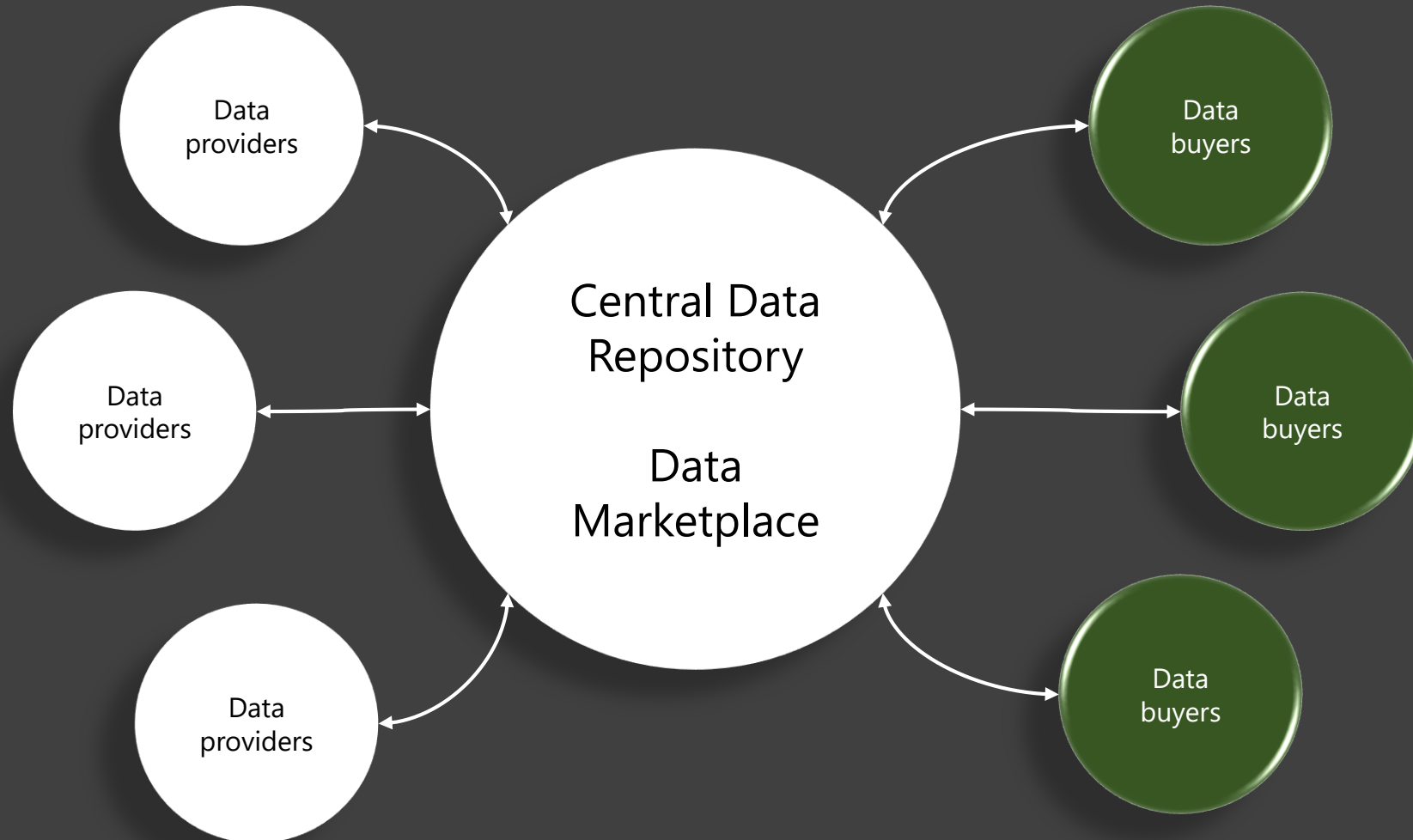


Exploitation



Availability

TRUST PROBLEMS WITH TRADITIONAL DATA EXCHANGE



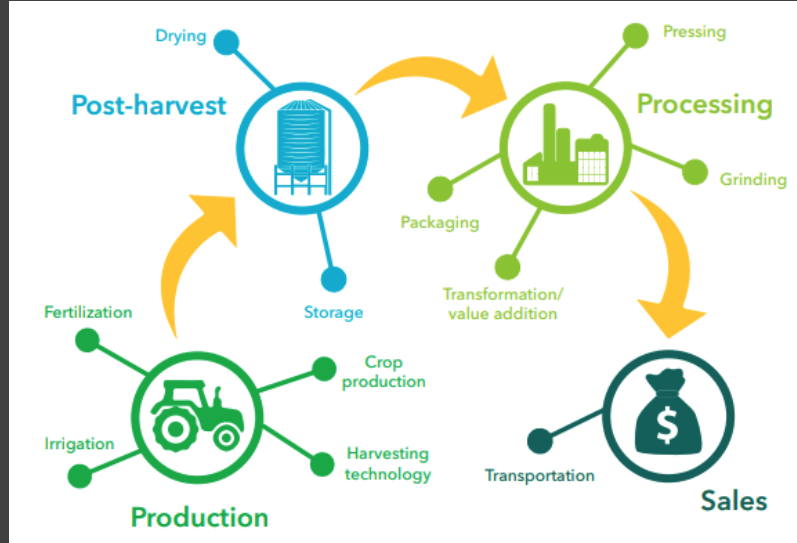
Trust?
Transparency?
Data ownership/privacy?
Data integrity?
Data security?

DECENTRALIZED DATA EXCHANGE ELIMINATE THE TRUST PROBLEM



Trusted
Transparent
Guaranteed
integrity
(immutability/traceability)
Secure data
ownership/
privacy issues
(smart contract)

HARA PRODUCTS



BY TAKING GRANULAR APPROACH, HARA STARTED ITS FOCUS AT THE INDIVIDUAL FARMERS IN THE PRE-PRODUCTION STAGE

1. DATA ACQUISITION



Farmers Registration and KYC



Land (Polygon) Tagging

2. PRODUCTION FINANCING & INSURANCE



Loan Origination Product



Insurance Origination Product

3. HARA AGRI-PRENEURSHIP



HARA Depo Kiosks

DIGITIZING AGRICULTURE DATA THROUGH AGRIPRENEURS

There are 74,350,000 Young Potential Indonesian Leaders living in rural area (age 21–35 – BPS 2019), they have solid aspiration to have better life while helping to improve their family economy and village welfare in the future



Better Financial



Better Access



Better Education



Better Environment



Active Farmers



Active in Organization



Own Small Kiosk



Housewife



Mbak Nun

AGRIPRENEUR
DREAMS

EVERYBODY WITH A **PHONE** CAN BECOME **AGRIPRENEUR** AND
JOIN THE HARA ECOSYSTEM

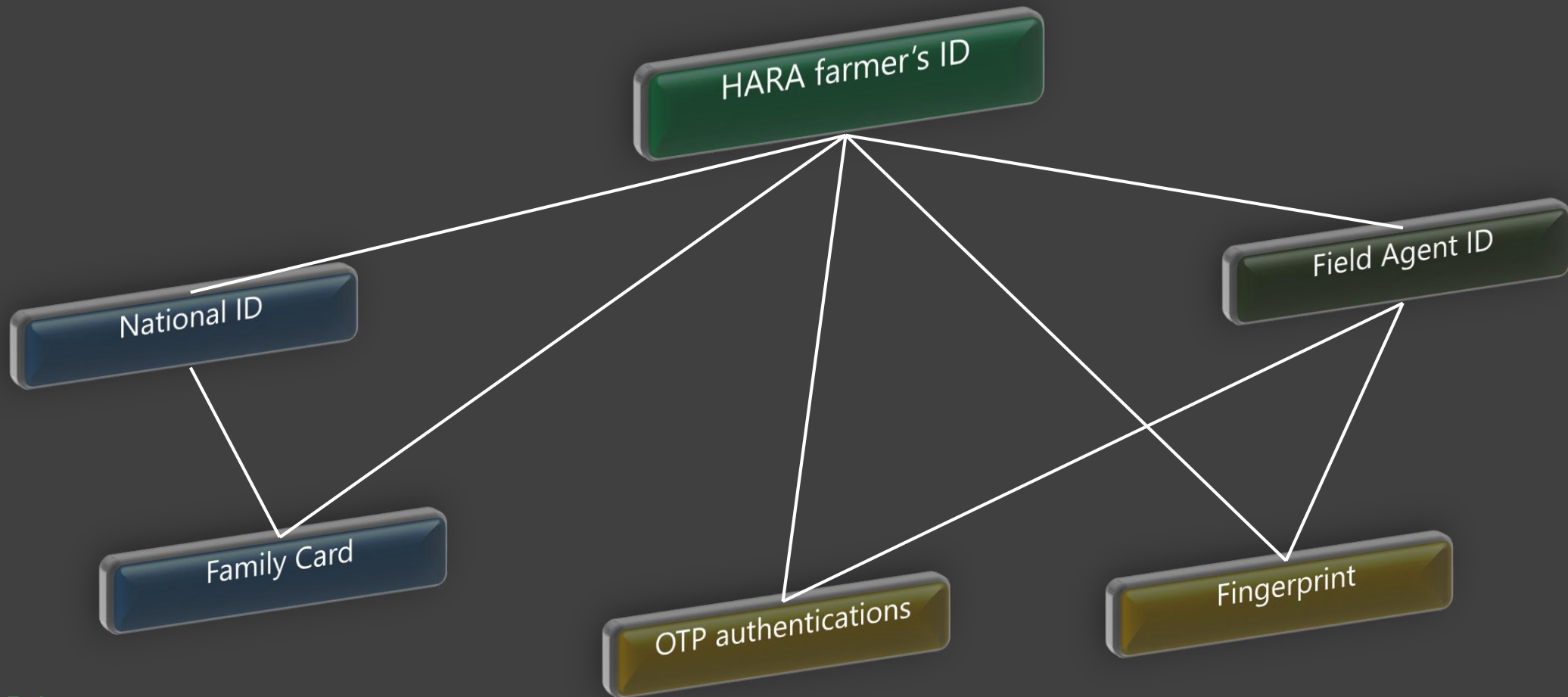


FARMER'S IDENTITY



FARMER'S LAND

Every Links To Legal Documents, Every Peer Verifications, Electronic Authentications Are Recorded As Blockchain Transactions



OPEN NEW ACCESSIBILITY AND POSSIBILITIES FOR FARMERS



MARKET



FINANCING & INSURANCE

DATA MONETIZATION



LAND TITLING



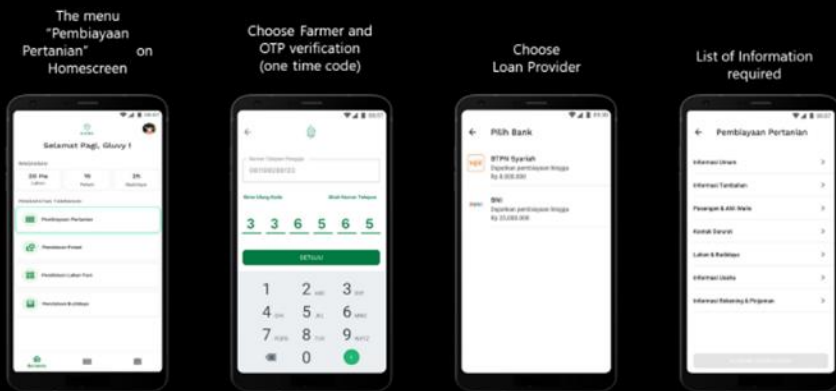
PRECISION AGRICULTURE

Bapak Nisu

Access to
micro-loans
and other
benefits



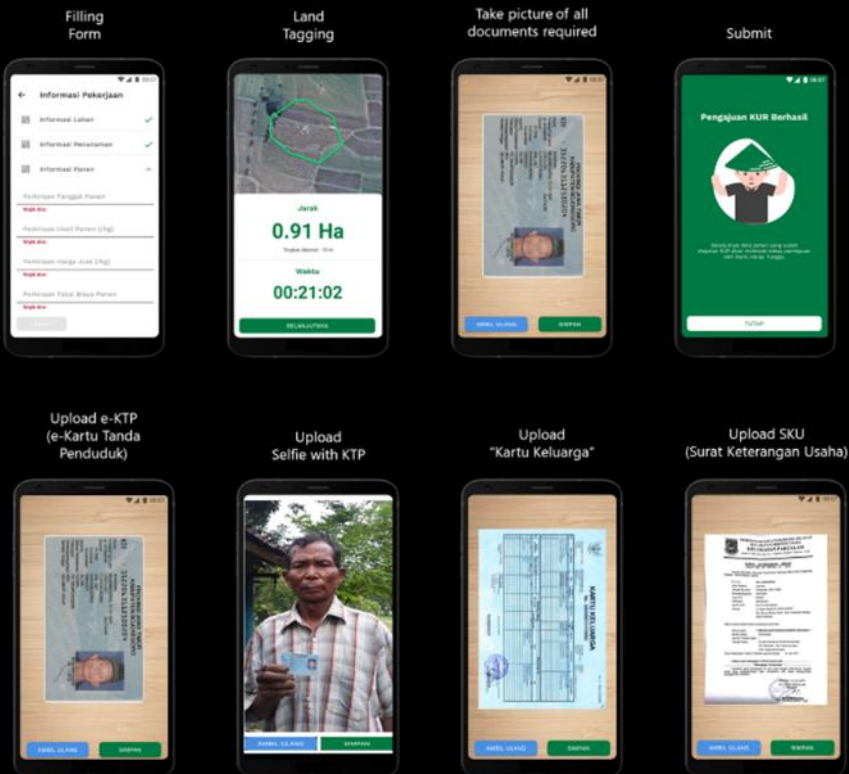
TOKEN INCENTIVES



HARA AGENT

HARA AGENT

Mobile App with social mission to provide access to finance for small-holders farmers by incentivizing field agents



FARMERS
KYC

Entry Farmers
personal
identifiable
information for
KYC



LAND
TAGGING

Tag farm land to
create polygon and
calculate land size



BANK
LOAN

Apply for bank
loan to support
farmers agricultural
business activity



CROP
INSURANCE

Apply for crop
insurance to
protect farmers
from harvest failure
bankruptcy

Incentified by verified
farmers and land tagged

Incentified by loan
disbursement and
repayment

Incentified by
premium payment
and claim

HARA PRODUCTION FINANCING



Loan Origination
Product



HARA CROP INSURANCE



Insurance Origination
Product



Asuransi Usaha Tani Padi

Gagal panen ga bikin senewen



Qoala, Hara, dan Jasindo bekerjasama untuk menghadirkan asuransi terlengkap yang akan melindungi sawah para petani padi dari segala risiko gagal panen yang diakibatkan oleh banjir, kemarau, hama, dan penyakit tanaman. Asuransi ini membuat semua usaha petani tidak berakhir dengan rugi. Dapatkan asuransi unggulan ini hanya di **HARA**.

Perlindungan Penuh	Terjamin & Terpercaya	Mudah & Cepat
Lahan sawah Anda akan terlindungi dari segala risiko gagal panen	100% didukung asuransi ternama dengan perlindungan pasti	Kompensasi yang cepat dan dibantu oleh tim yang sigap

Perlindungan mencakup

 **Banjir**  **Kemarau**  **Hama & Penyakit**

Bagaimana cara mendapatkan asuransi ini?

1. Dapatkan asuransi ini ketika melakukan peminjaman lewat HARA
2. Anda hanya akan dikenakan biaya premi sebesar 3% dari jumlah pinjaman
3. Begitu proses pendaftaran selesai, sawah Anda sudah resmi dilindungi

Bagaimana cara melakukan klaim?

1. Anda dapat melakukan klaim lewat agen HARA
2. Bagikan foto lahan yang rusak ke agen HARA
3. Mereka akan mengambil alih proses klaim



ASURANSI USAHA TANI PADI

Asuransi yang melindungi sawah para petani padi dari risiko gagal panen yang diakibatkan oleh banjir, kekeringan, hama dan penyakit tanaman.

Apa saja yang bisa Anda dapat dari asuransi ini?

1. Melindungi Anda dari kerugian akibat gagal panen yang disebabkan oleh
 - Banjir
 - Kekeringan
 - Hama dan penyakit (sesuai dengan yang tertulis di polis asuransi)
2. Ganti rugi akan Anda dapatkan ketika kerusakan sawah lebih dari 75%
3. Nominal ganti rugi akan disesuaikan dengan jumlah pinjaman Anda, maksimal Rp 15.000.000
4. Sawah Anda akan dilindungi selama satu siklus (4 bulan)

Cara Membeli polis Asuransi Usaha Tani Padi

Petani A memiliki lahan seluas 10 Hektar dengan pinjaman sebesar Rp 10.000.000. Beliau membeli Asuransi Usaha Tani Padi dan membayar biaya premi sebesar 3% dari pinjaman yaitu Rp 300.000. Petani A kini akan mendapat perlindungan selama 4 bulan.



Cara Melakukan Klaim

Selama 4 bulan sawah milik petani A akan dilindungi. Pada bulan ke-2, terjadi banjir besar dan sawah petani A mengalami kerusakan. Setelah mengajukan klaim lewat agen HARA, ternyata lahan petani A mengalami kerusakan lebih dari 75% dan berhak untuk mendapatkan ganti rugi sebesar Rp 10.000.000 (sesuai dengan nilai pinjaman).



HARA AGRIPRENEURSHIPS



HARA Depo Kiosks



blokTuban.com

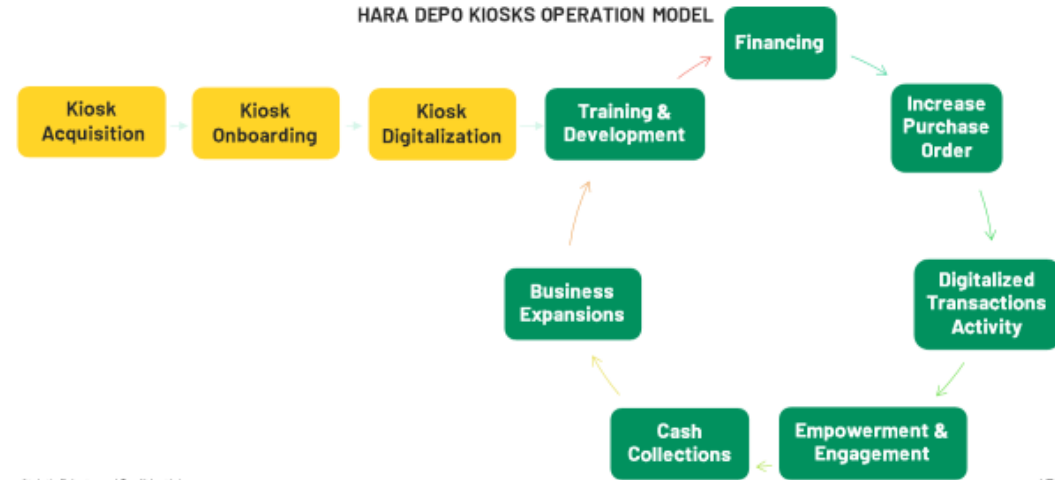
BNI, Hara Dan Pemerintah Tuban Mencetak 1000 Agripreneur

- OUTCOME**
1. Digital transaction record for kiosk verification purposes
 2. Traceable customer leads by doing data acquisition and loan to farmers
 3. Increased business growth by access to digital platform

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HARA DEPO KIOSKS OPERATION MODEL



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DEVELOPMENT SUPPORT BY HARA FOR EVERY AGRIPRENEUR

Every Agripreneur will go through 2 phases development journey. Phase 1 is mandatory for every Agripreneur who are onboarded and Phase 2 we will select monthly top 10 high performing Agripreneur to go to the next level of their journey on developing their business.



JOINING THE MISSION



BASIC ONBOARDING



TECHNICAL ASSISTANT



ON THE JOB ASSISTANT

Phase 2 will give a series of technical skills for them to be able to generate more income by producing their own products i.e. process food and packaging.

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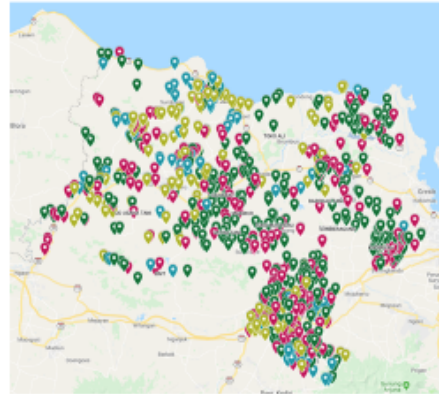


TECHNICAL SKILLS - FOOD PROCESSING



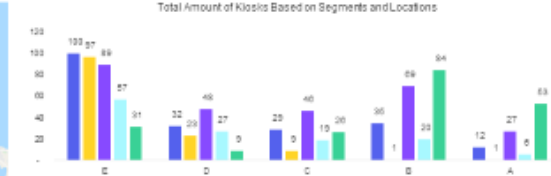
PACKAGING AND MARKETING

40

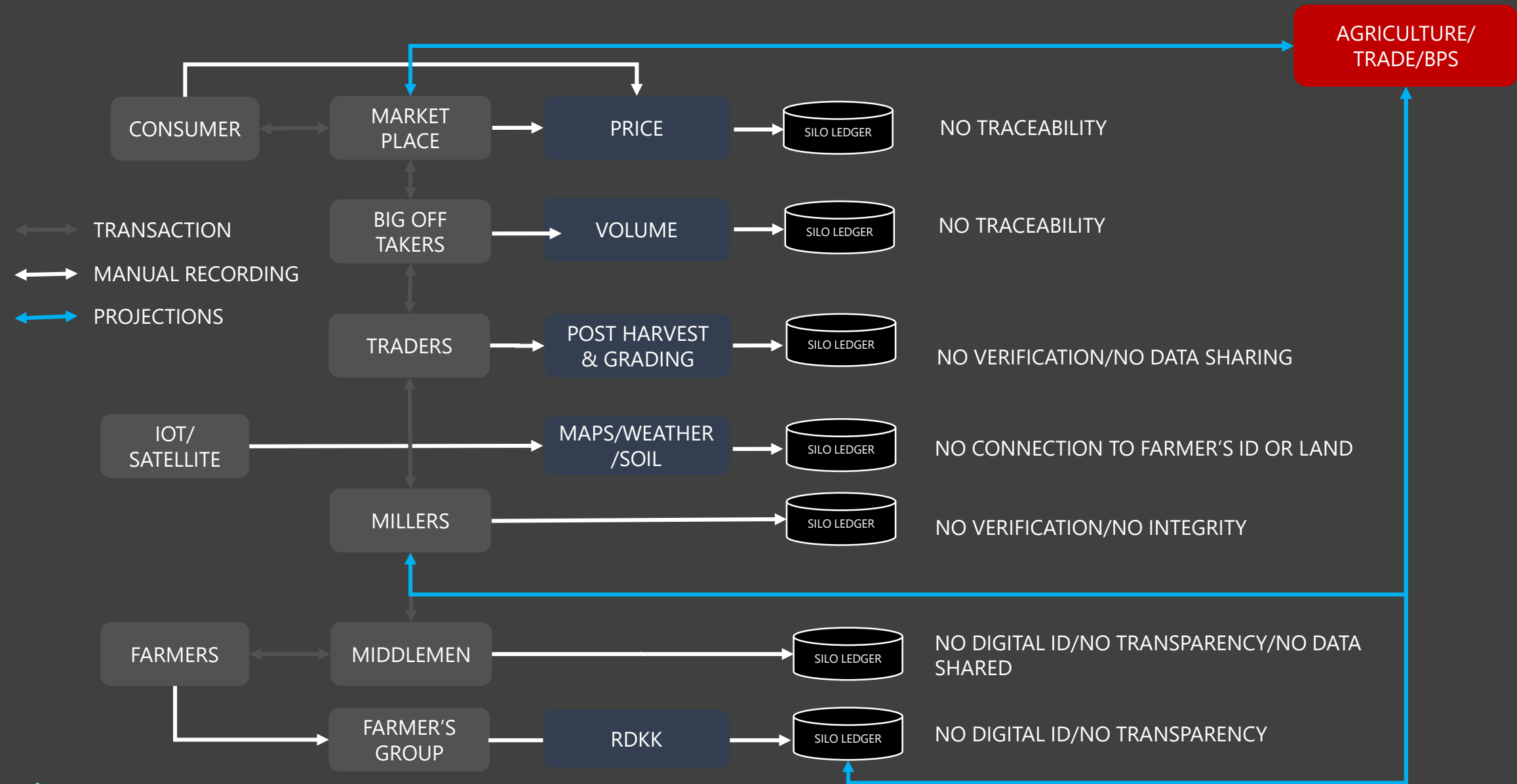


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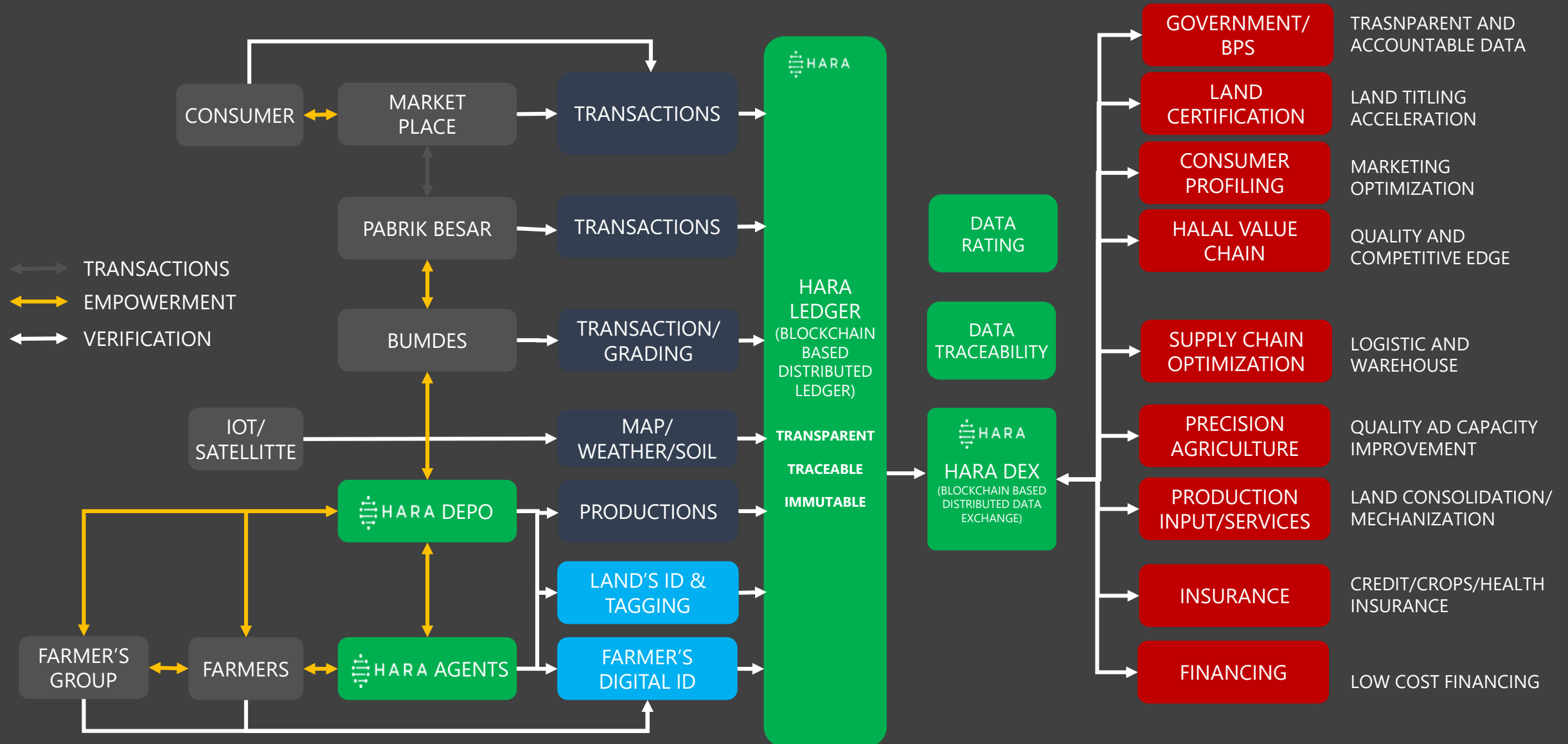
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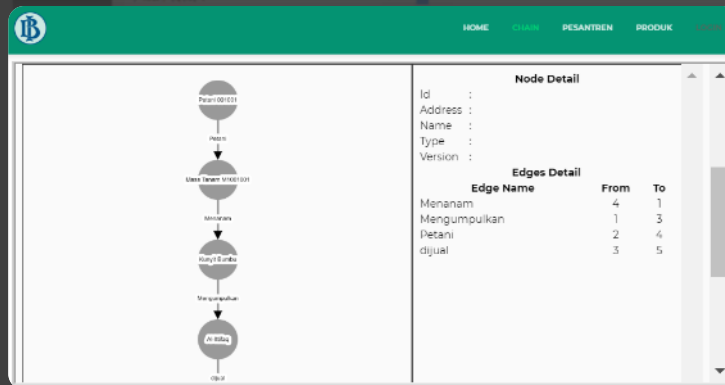
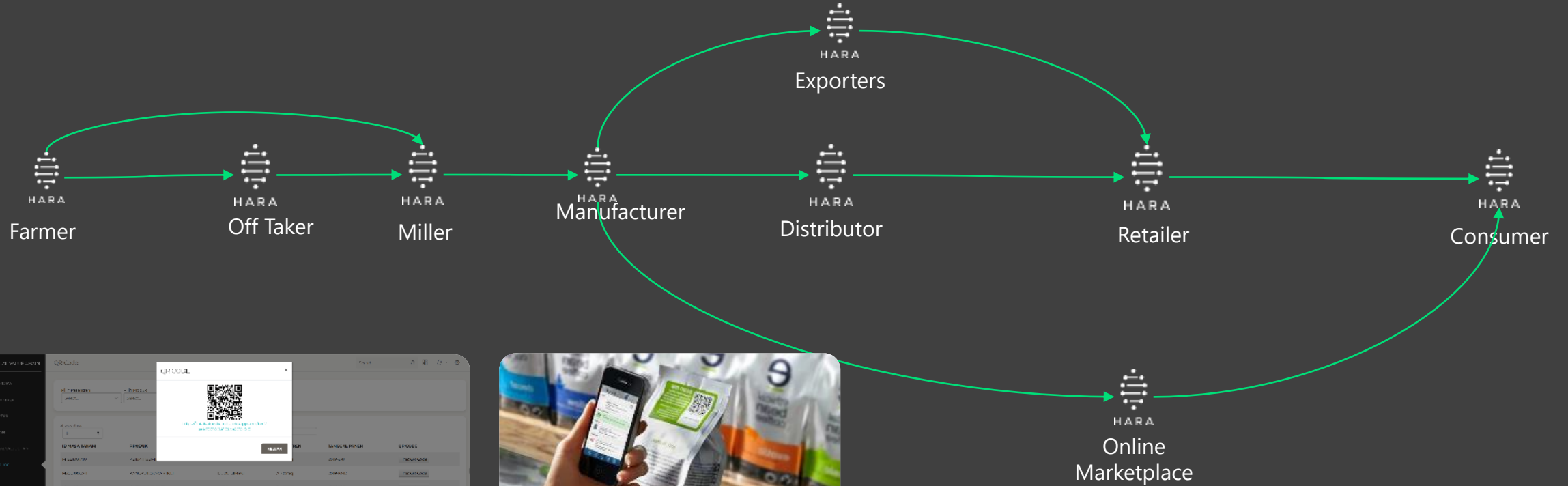
CURRENT AGRICULTURE DATA VALUE CHAIN



WITH HARA'S DEX AND HARA'S TRACEABILITY



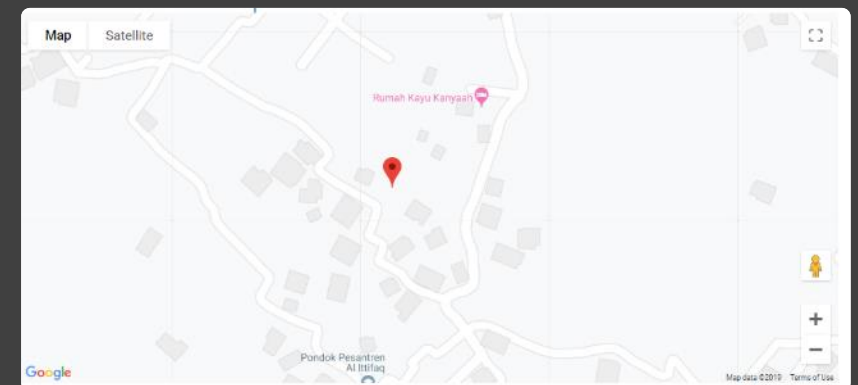
Visible Supply Chain Networks



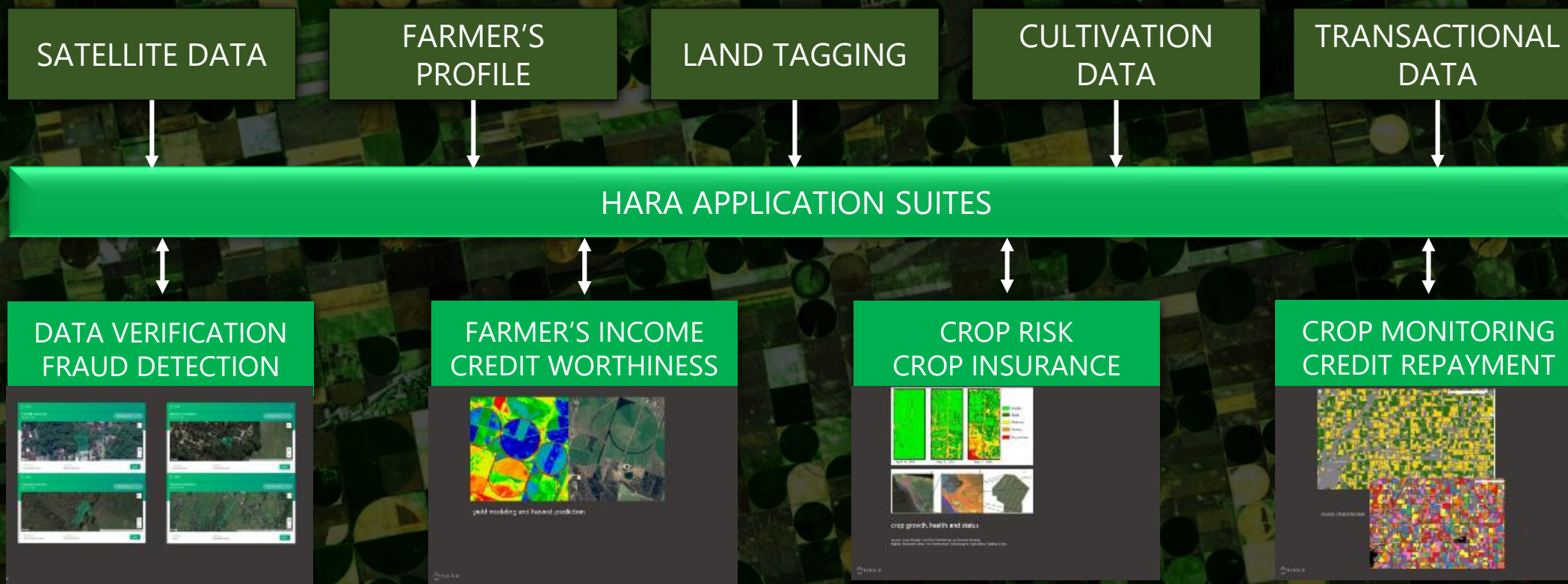
KUNYIT BUMBU

Koperasi: Al-Ittfaq
Tanggal Panen: 2019-9-8
Skor Secara Keseluruhan: 78.75

Pra Tanam (91.667)	Tanam (73.333)	Panen (100)	Pasca Panen (50)
10 Jul 2019 Pembibitan Panah merah Pembajakan dengan Pengolahan Manual (Cangkul)	09 Aug 2019 Menanam benih 19 Aug 2019 Pemupukan dengan Ponska 27 Aug 2019 Hama Ulat 29 Aug 2019 Memberikan Pestisida (Sygenta)	08 Sep 2019 Panen dengan Mesin	11 Sep 2019 Pengemasan dengan styrofoam Penjualan ke pembeli



the collected **historical ground data** from the farmers and IoT devices can be used to **train machine learning** to read and recognize **satellite images**

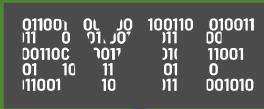


once we have enough historical data we can improve productivity further by applying precision agriculture



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STARTING WITH ONE AT A TIME.



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